

حمل الآن

مجاناً وحصرياً

المراجعة رقم (1)

اختبار شهر أكتوبر



Model Exam on Concept (1.1)

Total mark

15

1 (A) Complete the following sentences :

(5 marks)

- Plants absorb and from the soil through their
- There are three types of vessels in the human circulatory system which are arteries, and
- Tree trunks and shrubs have stems.
- Transport system in the plant consists of two types of vessels which are and

(B) Give a reason for the following :

Xylem in plant is a one-way vessel.

.....
.....

2 (A) Choose from column (B) what suits it in column (A) :

(5 marks)

(A)	(B)
1. Coconut seeds	a. sticking to animal fur.
2. Maple seeds and dandelion seeds	b. floating on water.
3. Burdock seeds	c. being eaten by animals.
4. Tomato seeds and apple seeds	d. traveling by wind.
	e. staying inside flowers without movement.

1. 2. 3. 4.

(B) What happens if ...?

We remove the flowers of a plant.

.....

3 (A) Put (✓) or (X) :

(5 marks)

- Humans, animals and plants need food and water to survive. ()
- All seeds need soil in its initial growth. ()
- There are tiny holes opening on the surface of stem that allow gases to pass through into the plant. ()
- Vines have climb stems. ()

(B) Write the scientific term of each of the following :

- It is found in the plant's leaves that gives them the green color and absorbs energy from the sunlight. (.....)
- A substance that is produced from the plant during photosynthesis process and provides it with its needed energy. (.....)

Model Exam on Concepts (1.1) & (1.2)

Total mark

15

1 (A) Choose the correct answer :

(5 marks)

- Winds play an important role in dispersing seeds.
a. floating b. sticky c. big heavy d. small light
- system in plants consists of tubes that water and nutrients move through it.
a. Digestive b. Respiratory c. Transport d. Nervous
- Any food chain starts with
a. insects. b. fungi. c. plants. d. bacteria.
- The kind of stems that extend underground are called stems.
a. climb b. tuber c. runner d. wood

(B) What happens if ...?

All the primary consumers disappear from a certain food chain.

.....
.....

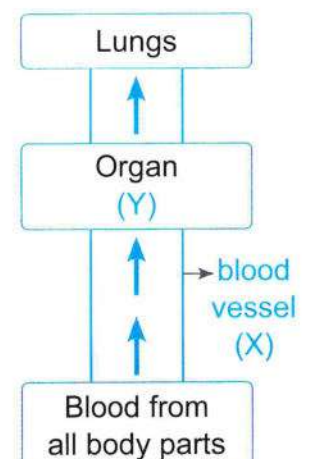
2 (A) Put (✓) or (X) :

(5 marks)

- Photosynthesis process takes place in the plant's roots. ()
- The food web describes energy flow and feeding interactions between living organisms in an ecosystem. ()
- At the beginning of germinating some bean seeds, they can grow without soil or water. ()
- Birds eat insects as preys to get their energy. ()

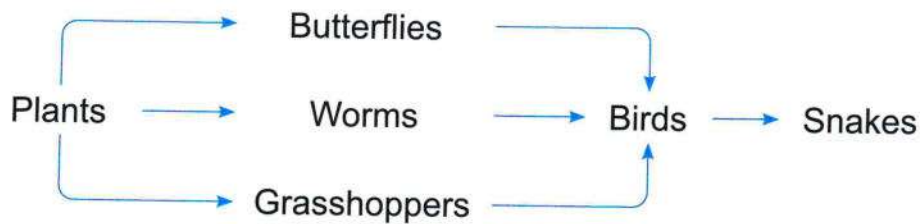
(B) The opposite figure to the right represents a blood vessel (X) that carries the blood to an organ (Y). Which answer represents (X) & (Y) ?

	(X)	(Y)
a	Artery	heart
b	Vein	brain
c	Vein	heart
d	Artery	brain



3 (A) Write the scientific term of each of the following :**(5 marks)**

1. The gas that is present in air and necessary for the formation of plant food. (.....)
2. Small structures in the plant's roots that increase the absorption of water and nutrients from the soil. (.....)
3. A group of living organisms that can live on decaying dead organisms. (.....)
4. Parts of the plant that are responsible for reproduction. (.....)

(B) Study the following food web, then choose the correct answer :

1. When disappear from this food web, birds will move away to search for food in another ecosystem.

a. butterflies only	b. worms only
c. grasshoppers only	d. primary consumers
2. Grasshoppers may die, when there is no

a. birds.	b. snakes.	c. plants.	d. butterflies.
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October Tests

Total mark

15

Model 1

1 (A) Put (✓) or (X) :

(5 marks)

1. The green plants can make their own food through flowers. ()
2. Phloem transports glucose to all parts of plant. ()
3. Air enters plants through roots. ()
4. Tuber stems grow and extend above the soil. ()

(B) Give a reason for the following :

Frog is a secondary consumer.

.....

2 (A) Choose the correct answer :

(5 marks)

1. Lion is from
a. producers. b. grass eaters. c. meat eaters. d. decomposers.
2. Plant takes from the air to make its own food.
a. water b. oxygen gas
c. carbon dioxide gas d. sugar
3. Photosynthesis process takes place inside
a. roots. b. leaves. c. stem. d. flowers.
4. from nonliving things in ecosystem.
a. Soil b. Fungi c. Bacteria d. Birds

(B) Form a food chain by using the following organisms :

(Frog – Grass – Grasshopper – Snake – Owl)

..... → → → →

3 (A) Write the scientific term of each of the following :

(5 marks)

1. They are organisms that feed on the dead organisms bodies and break them down into smaller pieces. (.....)
2. They are pores on the surface of the plant's leaves that allow gases move in and out of the plant. (.....)
3. A gas that is used in photosynthesis process. (.....)
4. A part of plant that carries water from roots to leaves. (.....)

(B) Cross out the odd word :

Grasses – Rats – Hawks – Snakes. (.....)

Model 2

Total mark

15

1 (A) Choose the correct answer :

(5 marks)

1. What substance used in photosynthesis does the plant get through its stomata ?

- a. Carbon dioxide gas. b. Sugar.
c. Oxygen gas. d. Water.

2. Which of the following is the correct order in which the water absorbed from the soil move through the plant ?

- a. Leaves → Stem → Root.
b. Root → Stem → Leaves.
c. Stem → Root → Leaves.
d. Stem → Leaves → Root.

3. are considered primary consumers.

- a. Grasses b. Flowers
c. Insects d. Lions

4. Grapes have stem.

- a. tuber b. runner
c. wood d. climb

(B) Form a food chain by using the following organisms :

(Decomposer – Lion – Deer – Grass)

..... → → →

2 (A) According to the following food chain, put (✓) or (X) :

(5 marks)

Grass → Rabbit → Snake

- | | |
|--------------------------|-----|
| 1. Rabbit is a producer. | () |
| 2. Grass is a predator. | () |
| 3. Snake is a producer. | () |
| 4. Rabbit is a prey. | () |

(B) What happens if ...?

Some seeds receive air, water and suitable temperature.

.....
.....

3 (A) Choose from columns (B) and (C) what suit them in column (A) : (5 marks)

(A) Seeds	(B) Characteristics	(C) Type of seed dispersal
1. Coconut seeds 	A. they have spines	a. by wind.
2. Burdock seeds 	B. they are light seeds	b. by animals' stool.
3. Dandelion seeds 	C. they float on water	c. by water.
4. Tomato seeds 	D. they can be eaten by animals	d. stick to animals fur.

1. → 2. → 3. → 4. →

(B) Give a reason for the following :

Phloem is very important for the plant.

.....

Model 3

Total mark

15

1 (A) Complete the following sentences : (5 marks)

1. Water and are important basic needs for growth and survival of living organisms.
2. Flowers in plants perform the function of
3. The transporting system in plants is similar to system in humans.

(B) What happens if ...?

1. The seeds of a plant fall on an unsuitable environment.

.....

2. Roots of a plant don't have root hair.

.....

2 (A) Write the scientific term of each of the following :

(5 marks)

1. Small openings in the leaves of the plant through which air passes. (.....)
2. Vessels in the plant which are responsible for transporting glucose sugar from leaves to all parts of the plant. (.....)
3. Transferring seeds of plants from one place to another. (.....)

(B) Give reasons for :

1. Rabbits are primary consumers.

.....

2. Producers depend on light energy of the Sun to grow.

.....

3 (A) Put (✓) or (X) :

(5 marks)

1. All living organisms can do photosynthesis process. ()
2. Xylem in plants is a one-way transporting vessel. ()
3. Sticky seeds need water to be dispersed. ()

(B) What is meant by ...?

1. Photosynthesis process.

.....

2. Food chain.

.....

كيفية طباعة صفحات معينة من ملف معين مثلا ازاي نطبع الصفحات من صفحة 4 الى صفحة 9



حمل الآن

مجاناً وحصرياً

المراجعة رقم (2)

اختبار شهر اكتوبر



Revision on Concept 1.1

Plant Needs

1 Definitions

Photosynthesis

It is the process through which the plant makes its own food inside its leaves by using the light energy from the sun.

Germination

It is a process in which the plant sprouts and begins to grow from a seed.

Plant reproduction

It is the process of making new plants.

Seed dispersal

It is the transportation of the seeds from one place to another.

Basic needs

They are natural resources that living organisms need to survive.

The sun

The main source of energy for all living organisms.

Glucose

It is the food of the plant that provides it with energy to grow and survive.

Flowers

They are the reproductive parts of many plants.

Stomata

They are pores (tiny openings) on the surface of plant's leaves that allow gases to move into and out of the plant.

2 Importance

Roots

- They absorb (draw) water and nutrients from the soil.
- They fix (anchor) the plant in the soil.

Stem

- It transports water and nutrients from the roots to the leaves.
- It supports the leaves and flowers of the plant.

Leaves

They make the plant's food (glucose) through photosynthesis process.

Flowers

They help the plant reproduce by producing seeds.

Xylem

It consists of small tubes that transport water and nutrients from the roots to the leaves.

Phloem

It consists of small tubes that transport glucose from the leaves to all plant parts.

Root hairs

They increase the amount of water and nutrients that the plant takes in from the soil.

Stomata

They allow gases to move into and out of the plant.

Chlorophyll

- It captures (absorbs) the light energy from the sun.
- It gives the leaves their green color.

Plant transport system

It is the system of vessels (tubes) that transport water, nutrients, and the plant's food between the plant's parts.

Human circulatory system

It is the system that transports oxygen and nutrients through blood to all body parts.

Heart

It pumps the blood to all body parts.

Arteries

They carry the blood rich in oxygen and nutrients (glucose) from the heart to all the body cells, so the body survives.

Veins

They return the blood that carries carbon dioxide and a small amount of oxygen and nutrients from the body cells to the heart.

Blood capillaries

They are tiny blood vessels that connect arteries to veins.

3 Give a reason for:

- ① Food is very important for humans and animals.
 - Because food provides them with the energy needed to grow and survive.
- ② Photosynthesis process is important for plants to survive.
 - Because it helps the plant to make its own food.
- ③ Green plants can make its own food.
 - Because they can make photosynthesis process.
- ④ Life on Earth without plants would be impossible.
 - Because plants produce oxygen gas during photosynthesis that is important for animals and humans to breathe.
- ⑤ Sunlight is a basic need for plant to survive.
 - Because plants use sunlight during photosynthesis process to make its own food.
- ⑥ Roots have important role in photosynthesis process of plants.
 - Because they absorb water and nutrients from the soil.
- ⑦ Plants' roots have structures like hairs.
 - Because they increase the amount of water and nutrients absorbed by plants' roots.
- ⑧ Xylem vessels are important for plants.
 - Because they transport water and nutrients from the roots to the leaves.
- ⑨ Phloem vessels are important for plants.
 - Because they transport glucose from the leaves to all plant parts.
- ⑩ Xylem is one-way vessel.
 - Because xylem carry water in one direction from roots to leaves.

- ⑪ The leaves is very important for plant.
 - Because leaves makes the plant's food during photosynthesis.
- ⑫ Chlorophyll has an important role in the photosynthesis process.
 - Because chlorophyll absorbs the energy of sunlight to make the plant's food during the photosynthesis process.
- ⑬ The presence of stomata on the surface of the plant's leaves.
 - To allow gases to move into and out the plant.
- ⑭ Flowers are very important for plants' survival.
 - Because they produce seeds that help the plant to reproduce.
- ⑮ A farmer found seeds that are not from the seeds of his farm.
 - Because seeds are dispersed from one place to another in many ways.
- ⑯ Burdock seeds can stick on animal fur and human cloth.
 - Because their seeds are spiny.
- ⑰ Seeds of dandelion or maple can disperse through the wind.
 - Because their seeds are small and light.
- ⑱ Seeds are dispersed in many ways.
 - Because the way of seed dispersal depends on the size and the shape of seeds.

4 What happens if:

- ① Plants can't get water from the soil?
 - Plants can't make their own food through the photosynthesis process.
- ② Plants can't get carbon dioxide gas from air?
 - Plants can't make their own food through the photosynthesis process.
- ③ We put a seed of bean in wet soil for many days?
 - Seed germinates and grows well.
- ④ A plant is placed in a dark place for few days?
 - Plant's leaves become weak and pale green.
- ⑤ A plant is placed in a dark place for many days?
 - The plant can't make photosynthesis process so it dies.
- ⑥ The plant doesn't have roots?
 - Plants can't absorb water and nutrients from the soil.

⑦ The plant doesn't have stem?

- Water and nutrients can not be carried from the roots to the leaves.

⑧ The leaves of a plant are removed?

- Plant can't make its own food through the photosynthesis process so it can't survive.

⑨ Plants' leaves don't contain chlorophyll?

- Plants' leaves can't absorb the sunlight and can't make the photosynthesis process.

⑩ The stomata on plants' leaves are closed for a long time?

- Gases can't move into or out of the plants' leaves.

⑪ We remove the flowers of a plant?

- Plant can't reproduce and can't produce seeds.

⑫ The plant transport system consists of xylem tubes only?

- The sugar produced in a plant's leaves won't be transported to the other parts of the plant.

⑬ The seeds of the dandelion were heavy?

- Dandelion seeds wouldn't be dispersed by wind.

⑭ There are no spines on burdock's seeds?

- Burdock seeds won't stick on animals' fur or humans' clothes, so they won't be dispersed.

5 Comparisons

Xylem	Phloem
It consists of small vessels that transport water and nutrients from roots to leaves .	It consists of small vessels that transport glucose sugar from leaves to other plant parts .

Arteries	Veins	Blood capillaries
They carry the blood rich in oxygen and nutrients from the heart to all the body cells.	They return the blood that carries carbon dioxide and waste from the body cells to the heart.	They connect arteries to veins.

6 Summary

P.O.C	Plants	Humans and Animals
Similarities	• All living organisms need water and air .	
Differences	They are different in: • Structure • Some needs • The way of getting food and gases.	
Basic Needs (To survive)	• Air • Water • Sunlight • Nutrients	• Air • Water • Food • Shelter
Way of Getting Energy	Plants can make their own food (glucose) inside their leaves through the photosynthesis process.	They must eat food because they can't make their own food.
Way of Getting Gases	Gases enter plants through the stomata in the leaves.	Air enters the human body through the mouth and nose , then travels to the lungs .

Some Concepts About Plant's Needs

Sunlight



① A plant placed in the sunlight.

- It grows **strong** and **healthy**.
- It grows with a **tall** stem.
- It has **more dark** green leaves.



② A plant placed in a dark room.

- It grows **weak** and **unhealthy**.
- It grows with a **short** stem.
- It has **less pale** green leaves.

Soil



- Soil is not a basic needs of a plant.
- Plants can grow without soil for a while if they have water and sunlight, but finally they need soil.

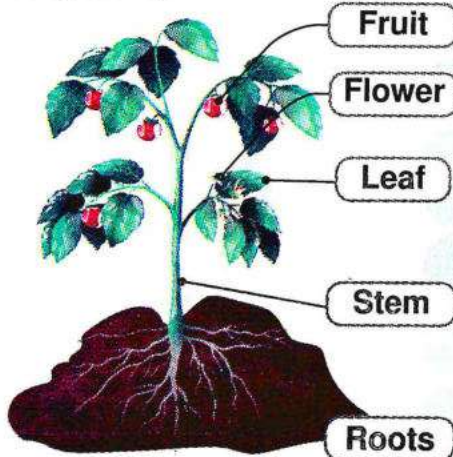
A plant can grow in a **wet paper towel**.

- The initial growth of the seeds in the wet paper towel and soil is **similar**.
- The seeds planted in wet paper towels grow **slower than** those planted in the soil.



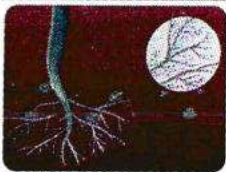
Plant Structure

- All structures inside the plant help it **survive** and **grow**.
- A green plant consists of **roots**, **stem**, **leaves**, and sometimes **fruits** and **flowers**.

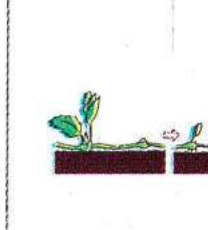


- It helps the plant reproduce by producing seeds.
- It helps in making the plant's food (glucose) through the photosynthesis process.
- It supports the plant parts.
- It carries water and nutrients from the roots to the leaves through the xylem.
- They absorb water and nutrients from the soil.
- They fix (anchor) the plant in the soil.

Other Small Structures Inside the Plant

Root hairs (extend from the roots)		• They increase the amount of water and nutrients absorbed from the soil.
Xylem (inside stem)		• A set of small vessels that transfer water and nutrients from the roots to the leaves .
Phloem (inside stem)		• It transfers food (glucose sugar) from the plant's leaves to other plant's parts .
Chlorophyll (inside the leaf)		• It captures light energy from the sun. • It gives the leaves their green color.
Stomata (inside the leaf)		• They are pores on the plant's leaves that allow air to move into or out of the plant.

Types of Stems

1 Wood Stem	2 Upright Stem	3 Climb Stem	4 Tuber Stem (Extend underground)	5 Runner Stem Extend above ground and helps form new plants.
				
Tree trunks and shrubs	Most flowers	Vine (grapes)	Potato plant	Strawberries

Types of Leaves

1 Narrow Leaves (Look like needles) (Such as pine trees)	2 Flat and Wide Leaves (such as banana leaves)
	

Flowers

- Flowers are the **reproductive parts** of a plant, as they help the plant **reproduce** by **producing seeds**.
- Flowers on plants have different **shapes**, **sizes**, and **colors**.
- Some plants have very small flowers that are hardly seen, such as **grass**.
- Sunflowers** have small, dark-colored seeds in the center of the flower.



Ways of Seed Dispersal

Seed dispersal It is the transportation of the seeds from one place to another.

- The way of seed dispersal depends on the **shape** and the **size** of the seeds.

1 Floating on water surface.

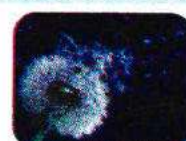


Coconut Seeds

2 Travelling by wind (light seed).



Maple Seeds



Dandelion Seeds

3 Sticking on animals' fur or on human clothing.



Burdock seeds
(have spines).

4 Eaten by animals and come out with their stool.



Tomato Seeds



Apple Seeds

Photosynthesis

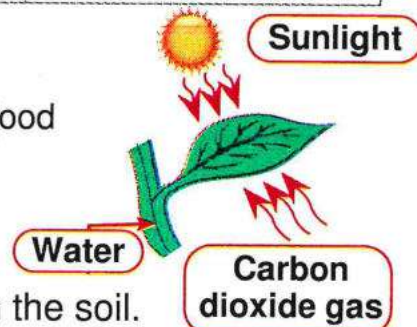
It is the process through which the plant makes its own food inside its leaves by using the light energy from the sun.

Steps:

- The **plant's roots** absorb water and nutrients from the soil.
- The **xylem** transports water and nutrients from the roots to the leaves.
- The **chlorophyll** captures the light energy from the sun.
- The **stomata** allow air to enter the plant's leaf.
- In the presence of sunlight, water combines with carbon dioxide gas to make a type of sugar called **glucose**.
- The **phloem** transports the glucose from the leaves to the other parts of the plant.
- The plant releases **oxygen** and **water vapor** in the air.

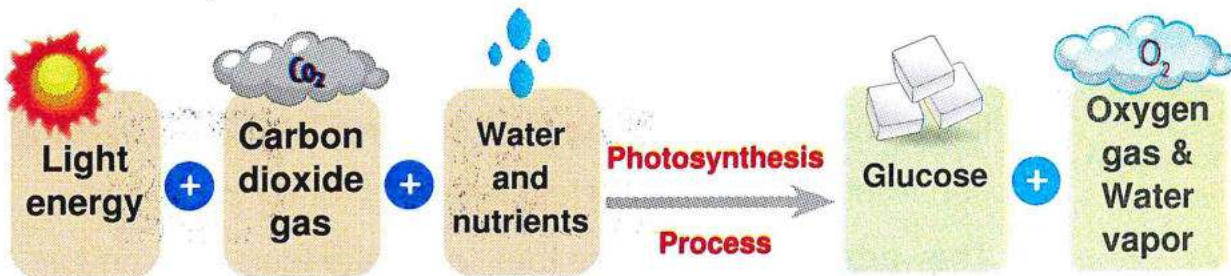
Energy Transformation

- Light energy absorbed from sunlight is converted into chemical energy stored in glucose during the photosynthesis process.



Products of Photosynthesis:

- 1 Glucose as a source of energy for plants.
- 2 Plants release oxygen gas and water vapor into the air.



Comparing Plants and Humans Transport Systems

P.O.C	Humans Circulatory System	Plants Transport System
Drawing		
Structure	1 Heart. 2 Blood vessels. A Veins. B Arteries. B Blood capillaries. 3 Blood.	1 Xylem. 2 Phloem.
Similarities	1 They are similar in function. They transport nutrients and gases to all parts of the living organism's body. 2 Both have one-way vessels.	

Revision on Concept 1.2

Energy Flow in Ecosystems

1 Definitions

Ecosystem

It is a community (an area) that contains living organisms and non-living things that interact with each other.

Producers

They are living organisms that can make their own food in the presence of sunlight.

Consumers

They are living organisms that eat other living organisms to get energy because they can't make their own food.

Decomposers

They are living organisms that carry out the decomposition process by breaking down or decaying dead organisms.

Primary consumers

They are animals that eat producers and they are known by Herbivores.

Secondary consumers

They are animals that eat primary consumers.

Tertiary consumers

They are animals that eat secondary consumers.

Predator

It is the animal that hunts (eats) another animal.

Prey

It is the animal that is hunted (eaten) by another animal.

Energy

It transfers between animals in a food web to help them survive.

Food chain

A model that shows a linear set of feeding relationships and the flow of energy among living organisms.

Food web

A model that shows several interconnected food chains among living organisms.

2 Importance

Ecosystem	It provides living organisms with food, water, and shelter.
Glucose	It provides plants with energy to grow and survive.
Decomposers	- They recycle nutrients back into the ecosystem through the decomposition process. - They increase soil fertility that is important for plant growth.

3 Give a reason for:

- ① Animals eat plants or other animals.
 - To get the energy, because they can't make their own food.
- ② Hawks depend on plants to get their energy.
 - Because hawks eat animals that eat plants.
- ③ The sun is very important for all living organisms on Earth.
 - Because the sun is the main source of energy for all living organisms.
- ④ Green plants are considered as producer organisms.
 - Because they can make their own food through the photosynthesis process.
- ⑤ Food is very important for humans.
 - Because food provides the human body with the needed energy to grow, survive and do all vital activities.
- ⑥ Decomposers are very important for an ecosystem.
 - Because they return nutrients of dead organisms back to the soil.
- ⑦ Snakes are considered as consumers.
 - Because they can't make their own food, so they eat other animals to get energy.
- ⑧ Soil fertility depends on decomposers.
 - Because they return nutrients to the ecosystem by decomposing dead organisms' bodies that increase the soil fertility.
- ⑨ Sticky seeds can be dispersed by humans or animals.
 - Because sticky seeds can be dispersed by sticking to humans' clothes or animals fur.

4 What happens if:

- ① A hawk is placed in an ecosystem that contains plants only?
 - The hawk moves to another ecosystem to search for food or it dies.
- ② There is no sunlight reaches the Earth's surface?
 - The plants cannot make their food so they will die.
- ③ All primary consumers disappear from a certain food chain?
 - All secondary consumers will die or move to another ecosystem.
- ④ The decomposers disappear from an ecosystem?
 - Dead organisms will not be decomposed and their nutrients will not return back to the soil.

5 Comparisons

Producers	Consumers	Decomposers
They are living organisms that can make their own food in the presence of sunlight.	They are living organisms that eat other living organisms to get energy.	They are living organisms that breaks down or decaying dead organisms.

Primary Consumers	Secondary Consumers	Tertiary Consumers
They are animals that eat producers.	They are animals that eat primary consumers.	They are animals that eat secondary consumers.

Food chain	Food web
A model that shows a linear set of feeding relationships and the flow of energy among living organisms.	A model that shows several interconnected food chains among living organisms.

6 Summary

Ecosystem It is a community (an area) that contains **living organisms** and **nonliving things** that interact with each other.

Ecosystem Components

Living Organisms	Biotic Factor	• Humans. • Animals. • Plants.
Nonliving Things	A biotic Factor	• Air. • Soil. • Water.

Ecosystem examples:



- Ecosystems provide living organisms with **food** and **shelter** to survive.
- Energy moves between animals when they feed on each other.
- When living organisms die, their bodies decompose.
- Animals don't choose their food, but they eat what their bodies need.

Rabbits eat grass.	Caracals eat mice and rabbits.	Birds eat worms.
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- Hawks are **meat-eating animals**.
- Hawks eat **snakes, mice, fish, birds, squirrels, rabbits**, and other **small ground animals**.
- Hawks don't eat plants, but they eat animals that eat plants. So, they also depend on plants to get their needed energy.
- Hawks are attacked by a few predators, such as **eagles** and **other hawks**.
- When hawks die, **decomposers** return their energy to the soil.



Energy Transfer in Ecosystems

- The sun is the primary (main) source of energy for all living organisms.
- Green plants are producers, while animals and humans are consumers.

1 Producers (The first link in any food chain)

- They are living organisms that can make their own food in the presence of sunlight through photosynthesis process.
- **Example:** Green plants

2 Consumers

- They are living organisms that feed on other organisms to get energy.

a Primary consumers: (The second link in a food chain)

They are living organisms that eat producers.

Examples: insects, mice and rabbits.

b Secondary consumers:

They are living organisms that eat primary consumers.

Examples: birds and frogs.

c Tertiary consumers: (The third link in a food chain)

They are living organisms that eat secondary consumers.

Examples: alligators, lions and sharks.

3 Decomposers (The final link in any food chain)

- They are living organisms that carry out the decomposition process by decaying dead organisms.
- **Importance:**
 - 1 They recycle nutrients back into the ecosystem.
 - 2 They increase the soil's fertility.
- **Examples of decomposers:**

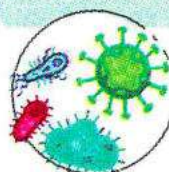
Fungi



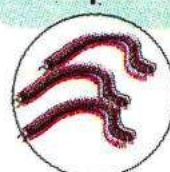
Earthworms



Bacteria



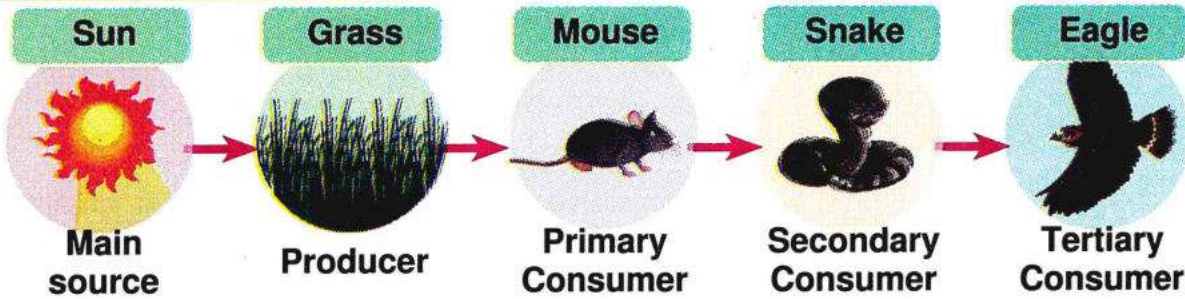
Millipedes



Food Chain

It is a model that shows a linear set of feeding relationships and the flow of energy among living organisms.

Example of a food chain:



- The energy from the **sun** passes to the **grass**, then to the **mouse**, then to the **snake**, then to the **eagle**.

Predator

It's the animal that eats (hunts) another animal.



Prey

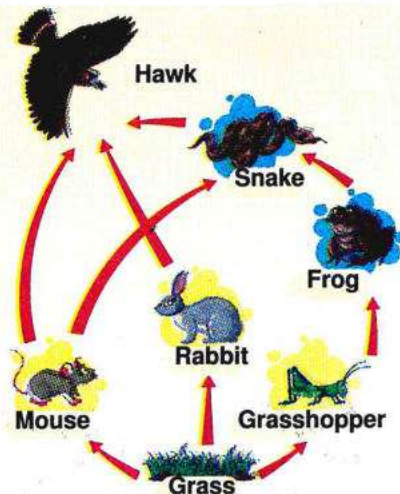
It's the animal that is eaten (hunted) by another animal.



Food web

It is a model that shows several interconnected food chains among living organisms.

- A food web is made up of several interconnected food chains.
- The food web is better than the food chain in showing the interaction among organisms many living organisms that share the same food resources.



Dr. Becky Barak



Job

- **Plant community ecologist**

(It means she studies groups of plants.)

Where does she work?

- She does her researches in **natural areas (prairie)**, where plants and animals exist.

Studies

- She learned about **ecology**.
- She studied **restoration ecology**.

(Restoration ecology means repairing damaged habitats.)

Seed Dispersal

1 Sticky Seeds

Their seeds can stick to

Human clothes

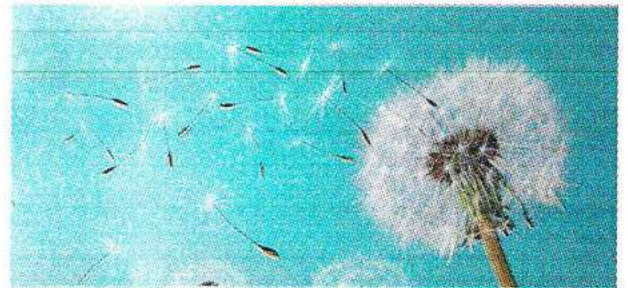


Animals fur



2 Light (Flying) Seeds

They are dispersed by the wind.



1.1

-

- 9 A potato plant has a/an stem.
a. upright **b.** climb **c.** tuber **d.** runner
- 10 Water and nutrients are carried from the roots to the leaves through the
a. stem **b.** soil **c.** fruits **d.** flowers
(Cairo 2024)
- 11 Plants use during the photosynthesis process
a. nitrogen gas **b.** oxygen gas
c. carbon dioxide gas **d.** sugar
(Giza 2023)
- 12 Food materials are transported from the leaves to other parts of the plant through the
a. xylem **b.** phloem **c.** chlorophyll **d.** stomata
(Cairo 2023)
- 13 absorb the sunlight that the plant needs to make food.
a. Roots **b.** Leaves **c.** Xylem vessels **d.** Stems
(School Book)
- 14 Water and nutrients are transported from the roots to the leaves through the
a. xylem **b.** phloem **c.** chlorophyll **d.** stomata
(Alex. 2023)
- 15 Flowers produce for reproduction.
a. leaves **b.** stems **c.** seeds **d.** roots
(Alex. 2023)
- 16 are pores on the surface of a plant's leaves that allow gases to move into and out of the plant.
a. Stomata **b.** Xylems **c.** Phloems **d.** Hairs
(Giza 2023)
- 17 Green plants can make their own food through their
a. roots **b.** leaves **c.** stems **d.** flowers
(Beni Suef 2023)

(South Sinai 2023)

(Dakahlia 2023)

(Qalyubia 2023)

(Giza 2023)

(Giza 2024)

(Cairo 2024)

(Menoufia 2024)

G

(Dakahlia 2024)

(Helwan 2024)

(Beheira 2024)

- 4 A green plant can grow well if it is placed in a dark room for many days. ()
(Giza 2023)
- 5 Tomato seeds are light, so they can disperse through air. ()
(Beheira 2023)
- 6 Veins return the blood rich in carbon dioxide gas to the heart. ()
(Al-Azhar 2024)
- 7 Plants make their own food by respiration. ()
(Ministry Models 2023)
- 8 Arteries are vessels in the human circulatory system that carry the blood rich in carbon dioxide gas. ()
(Sharkia 2023)
- 9 Burdock seeds are spiny, so they can stick to animals' fur. ()
(Cairo 2023)
- 10 Plants' stems absorb oxygen gas from the air. ()
(Damietta 2023)
- 11 Carbon dioxide gas is one of the plant needs that helps it grow and survive. ()
(Dakahlia 2024)
- 12 The soil is not from the basic needs for the plant. ()
(Cairo 2023)
- 13 The transport system of plants does the same function of the circulatory system in humans. ()
(Ministry Models)
- 14 Veins carry the blood rich in oxygen and nutrients. ()
(Cairo 2023)
- 15 In many plants, flowers are responsible for reproduction. ()
(Dakahlia 2024)
- 16 Air enters plants through their roots. ()
(Giza 2024)
- 17 Plants' seeds are formed inside the flowers. ()
(Sohag 2024)

Q3. Complete the following sentences:

- 1 In plants' leaves, energy is converted into energy during the photosynthesis process. (Menoufia 2023)
- 2 Inside the green plant, sunlight allows carbon dioxide to combine with that's absorbed from the soil by the plant's (Behira 2023)
- 3 Some seeds can be transported from one place to another by floating on water, such as seeds or traveling by wind, such as seeds. (Qalyoubia 2023)
- 4 There are three types of vessels in the human circulatory system, which are,, and blood capillaries. (New Cairo 2023)
- 5 The stem carries water and nutrients from the to the of the plant. (Luxor 2023)
- 6 The photosynthesis process happens in the plant's (Giza 2023)
- 7 Plants produce and during the photosynthesis process. (New Cairo 2023)
- 8 The nutrients and oxygen are transported through the human blood to the body cells by the system. (Alex. 2024)
- 9 Trees and other plants make food through the process (Alex. 2023)
- 10 Traveling by wind and floating on water are ways of (Dakahlia 2023)
- 11 Arteries carry the blood rich in and from the heart to all body parts. (Gharbia 2024)
- 12 Veins carry the blood that contains gas from all body parts to the (Heliopolis 2023)
- 13 return the blood that contains carbon dioxide gas back to the heart. (Cairo 2024)
- 14 carry the blood rich in oxygen and glucose from the heart to the organs. (Dakahlia 2024)
- 15 are the reproductive parts of many plants. (Qalyoubia 2024)

Q4. Write the scientific term:

- 1 It's a system of tubes through which water, nutrients, and plant food are carried all over the plant. (Cairo 2024) (.....)
- 2 They're vessels in the plant through which water and nutrients move up from the roots to the leaves. (Menofia 2024) (.....)
- 3 It's a gas taken from the air by the leaves to help the plant make its own food. (Gharbia 2024) (.....)
- 4 It's a part of the plant that carries water and nutrients from the roots to the leaves. (Cairo 2023) (.....)
- 5 It's the gas released from plants during the photosynthesis process. (Damietta 2023) (.....)
- 6 It's the process by which plants make their own food using the energy of the sunlight. (Aswan 2023) (.....)
- 7 They're parts of the plant that are responsible for reproduction. (Cairo 2024) (.....)
- 8 It's a part of plant that carries water from the roots to the leaves. (Gharbia 2024) (.....)

Q5. Cross out the odd word:

- 1 Roots – Stems – Leaves – Sunlight (Cairo 2024)
- 2 Carbon dioxide gas – Water – Oxygen gas – Nutrients (Giza 2023)

Q6. Give reasons for:

- 1 Seeds of maple or dandelion plants can disperse through wind. (Fayoum 2023)

.....

- 2 A farmer found seeds that are not from the seeds of his farm.

(Cairo 2023)

- 3 The circulatory system has an important role for humans to survive.

(Menofia 2023)

- 4 Roots have an important role in the photosynthesis process of plants.

(Sohag 2024)

- 5 The photosynthesis process is important for plants to survive. (Cairo 2023)

- 6 Burdock seeds can stick to animals' fur.

(Cairo 2024)

- 7 Food is very important for humans.

(Alex. 2024)

- 8 Xylem vessels are important for the plant.

(Giza 2023)

Q7. What happens if:

- 1 We put a seed of bean in wet soil for many days?

(Giza 2023)

- 2 We put a green plant in a dark room for many days?

(Cairo 2023)

- 3 We remove the flowers of a plant?

(Menofia 2023)

Concept 1.2



Q1. Choose the correct answer:

- Secondary consumers can eat only. (Cairo 2023)
a. decomposers b. producers
c. primary consumers d. tertiary consumers
- Plants are considered because they absorb sunlight to make their own food. (Banha 2023)
a. producers b. consumers
c. decomposers d. nonliving things
- The leaves of green plants absorb the sunlight to combine water with to produce their own food. (Giza 2023)
a. oxygen gas b. soil
c. carbon dioxide gas d. roots
- is the main source of energy for all living organisms. (Alex. 2023)
a. Food b. The moon c. Water d. The Sun
- Wind plays an important role in dispersing seeds. (Giza 2023)
a. small, light b. big, heavy c. sticky d. floating
- Glucose sugar is transported from the leaves to other parts of the plant through the (Alex. 2023)
a. xylem b. phloem c. roots d. stems
- A caracal obtains its energy by eating (Aswan 2023)
a. sharks b. grass c. mice d. butterflies
- The first link in any food chain is the (Alex. 2023)
a. consumers b. producers c. decomposers d. food web
- In a plant's leaves, light energy is converted into energy during the photosynthesis process. (Damietta 2023)
a. sound b. electrical c. chemical d. kinetic
- Plants can make their own food through the process. (Alex. 2023)
a. breathing b. photosynthesis c. digestion d. reproduction

- 11 A lion is considered a (Alex. 2024)
a. producer **b.** grass-eater **c.** meat-eater **d.** decomposer
- 12 All the following are consumers, except (Alex. 2024)
a. hawks **b.** insects **c.** grass **d.** rabbits
- 13 One of the ways of seed dispersal is floating on water, as in
a. burdock seeds **b.** tomato seeds
c. dandelion seeds **d.** coconut seeds (Suez 2023)
- 14 Which of the following living organisms can make their own food?
a. Hawks **b.** Mice **c.** Pine trees **d.** Caracals
 (Cairo 2023)
- 15 Many insects are considered (Giza 2024)
a. producers **b.** decomposers
c. primary consumers **d.** secondary consumers
- 16 Organisms that break down dead animals and plants are called
a. decomposers **b.** consumers **c.** prey **d.** producers
 (Gharbiya 2023)
- 17 decompose the remains of dead organisms into nutrients.
a. Bacteria and butterflies **b.** Fungi and locusts
c. Worms and butterflies **d.** Bacteria and fungi
 (Qalyoubia 2024)
- 18 Maple seeds travel by wind because they are (Cairo 2023)
a. light seeds **b.** spiny seeds **c.** heavy seeds **d.** smooth seeds
- 19 Decomposers always the soil. (Damietta 2023)
a. pollute **b.** damage **c.** benefit **d.** harm
- 20 All the following ways help plants disperse their seeds, except (Qalyoubia 2023)
a. water **b.** air **c.** animal bodies **d.** sunlight
- 21 The final link in any food chain is the (Alex. 2023)
a. consumer **b.** producer **c.** decomposer **d.** food web

- 22 In a food chain, the energy transfers from (Dakahlia 2023)
- a. a predator to prey b. a producer to a producer
c. prey to a predator d. a consumer to a producer
- 23 Wind plays an important role in dispersing seeds. (Cairo 2023)
- a. small, light b. big, heavy c. sticky d. floating
- 24 Food webs show the interactions between (Fayoum 2023)
- a. few nonliving things b. many nonliving things
c. few living organisms d. many living organisms
- 25 Hawks get their energy by eating (Giza 2023)
- a. plants only b. animals only
c. plants and animals d. nonliving things
- 26 All the following are considered producer organisms, except
- a. grass b. hawks c. algae d. trees

(School Book)

Q2. Put (✓) or (X):

- 1 All living organisms depend on each other for getting energy. ()
(School Book)
- 2 Food and oxygen provide the body with the needed energy. ()
(Alex. 2023)
- 3 The first link in any food chain is a consumer. ()
(Giza 2023)
- 4 Producers need consumers to live and grow. ()
(Giza 2023)
- 5 Potato plants have tuber stems. ()
(Cairo 2024)
- 6 Food chains start with decomposers. ()
(Giza 2023)
- 7 Phloem transports food materials from leaves to other parts of the plant. ()

(Giza 2023)

- 8 All living organisms don't need energy to survive. (Giza 2023) ()
- 9 The Sun produces energy that decomposers use to make their food. (Cairo 2024) ()
- 10 A plant is fixed in the soil by the help of its roots. (Cairo 2023) ()
- 11 Recycling nutrients back to the ecosystem is the main function of the consumers. (Gharbia 2023) ()
- 12 A hawk can get its needed energy directly by eating beetles. () (Alex. 2023)
- 13 Decomposers have a role in the ecosystem. (Helwan 2024) ()
- 14 Producers and consumers use carbon dioxide gas for making their food. (Giza 2023) ()
- 15 Xylem is important for plants to transfer water from the plant's roots to the leaves. (Dakahlia 2023) ()
- 16 An ecosystem consists of living organisms only. (School Book) ()
- 17 Humans can eat plants and animals. (Cairo 2023) ()
- 18 A food web is the interconnected food chains that show many different feeding relationships. (Gharbia 2023) ()
- 19 There is no interaction between the components of an ecosystem. (Menofia 2023) ()
- 20 All plants need the same way to disperse their seeds. (Giza 2023) ()
- 21 The chlorophyll in plants' roots absorbs sunlight. (Cairo 2023) ()
- 22 Hawks do not eat some types of food, like plant leaves. () (Cairo 2024)
- 23 A plant's stem has hairs that absorb oxygen gas from the air. () (Damietta 2023)
- 24 Stomata allow gases to move into and out of the plant. () (Minia 2023)

Q3. Write the scientific term:

- 1 It transfers between the animals in a food web to help them survive.
(.....)
(Damietta 2023)
- 2 It's the gas that is produced from the photosynthesis process.
(.....)
(Damietta 2023)
- 3 It is a model that shows a linear set of feeding relationships and energy flow between living organisms.
(.....)
(Helwan 2024)
- 4 It's a place that provides food, water, and shelter to all living organisms that live in it.
(.....)
(Cairo 2023)
- 5 It's the gas that is present in air and necessary for the formation of plant food.
(.....)
(Ismailia 2023)
- 6 It is found in a plant's leaves that gives them green color and absorbs energy from the sunlight.
(.....)
(Alex. 2023)
- 7 It's a community that contains living organisms and nonliving things.
(.....)
(Cairo 2024)
- 8 They are consumers which feed on secondary consumers.
(.....)
(New Cairo 2023)
- 9 It's a group of living organisms that can live on decaying dead organisms.
(.....)
(Cairo 2023)
- 10 It's the consumer that hunts and eats another animal.(.....)
(Beheria 2024)

Q4. Complete the following sentences:

- 1 Bacteria and fungi are considered, so they can feed on
.....
- 2 When living organisms die, their energy is returned to the
(Alex. 2023)
- 3 The interaction among many food chains is known as
(Sohag 2024)
- 4 In any food chain, plants are considered
(Suez 2023)
- 5 Plants produce and during the
photosynthesis process. (Cairo 2023)
- 6 Humans can eat producers and
(Cairo 2023)

Q5. Give reasons for:

- 1 Life on Earth without plants would be impossible. (Dakahlia 2024)
.....
.....
- 2 Green plants are considered producer organisms. (Cairo 2024)
.....
.....
- 3 Sunlight is important for all living organisms. (Damietta 2023)
.....
.....
- 4 Chlorophyll has an important role in the photosynthesis process.
(Cairo 2023)
.....
.....

- 5 Soil fertility depends on decomposers.

(Beheira 2024)

- 6 Snakes are considered consumers.

(Alex. 2023)

Q6. What happens if:

- 1 A hawk is placed in an ecosystem that doesn't contain any living organisms except plants?

(Cairo 2023)

- 2 All primary consumers disappear from a certain food chain?

(Giza 2023)

Q7. Form food chains by using the following organisms:

- 1 Frog – Grass – Locust – Snake – Owl

(Alex. 2024)

- 2 Frog – Grass – Snake – Grasshopper – Hawk

(Giza 2023)

1.1

-

- 9 A potato plant has a/an stem.
a. upright b. climb c. tuber d. runner
(Cairo 2024)
- 10 Water and nutrients are carried from the roots to the leaves through the
a. stem b. soil c. fruits d. flowers
(Cairo 2024)
- 11 Plants use during the photosynthesis process
a. nitrogen gas b. oxygen gas
c. carbon dioxide gas d. sugar
(Giza 2023)
- 12 Food materials are transported from the leaves to other parts of the plant through the
a. xylem b. phloem c. chlorophyll d. stomata
(Cairo 2023)
- 13 absorb the sunlight that the plant needs to make food.
a. Roots b. Leaves c. Xylem vessels d. Stems
(School Book)
- 14 Water and nutrients are transported from the roots to the leaves through the
a. xylem b. phloem c. chlorophyll d. stomata
(Alex. 2023)
- 15 Flowers produce for reproduction.
a. leaves b. stems c. seeds d. roots
(Alex. 2023)
- 16 are pores on the surface of a plant's leaves that allow gases to move into and out of the plant.
a. Stomata b. Xylems c. Phloems d. Hairs
(Giza 2023)
- 17 Green plants can make their own food through their
a. roots b. leaves c. stems d. flowers
(Beni Suef 2023)

18 can make their own food.

a. Plants

b. Animals

c. Humans

d. Plants and some animals

(South Sinai 2023)

19 carry the blood rich in oxygen and glucose from the heart to the body cells.

a. Arteries

b. Veins

c. Lungs and veins

d. Brain and veins (Dakahlia 2023)

20 Plants use the energy of to produce their food

a. the Sun

b. the wind

c. batteries

d. the moon

(Qalyubia 2023)

21 The in the leaves allow(s) air to enter the plant.

a. xylem

b. phloem

c. stomata

d. chlorophyll

(Giza 2023)

22 Stomata are present on the plant's to allow air to pass through them.

a. roots

b. stems

c. leaves

d. flowers

(Giza 2024)

23 The kind of stems that extend underground are called stems.

a. climb

b. tuber

c. runner

d. wood

(Cairo 2024)

24 The blood rich in carbon dioxide gas returns back to the heart through the

a. arteries

b. veins

c. lungs

d. xylem

(Menoufia 2024)

Q2. Put (✓) or (X):

1 The reproductive parts of many plants are flowers.

(✓)

(Dakahlia 2024)

2 Green plants make photosynthesis process in their roots.

(X)

(Helwan 2024)

3 Coconut seeds can float on water.

(✓)

(Beheira 2024)

- 4 A green plant can grow well if it is placed in a dark room for many days. (X)
(Giza 2023)
- 5 Tomato seeds are light, so they can disperse through air. (X)
(Beheira 2023)
- 6 Veins return the blood rich in carbon dioxide gas to the heart. (✓)
(Al-Azhar 2024)
- 7 Plants make their own food by respiration. (X)
(Ministry Models 2023)
- 8 Arteries are vessels in the human circulatory system that carry the blood rich in carbon dioxide gas. (X)
(Sharkia 2023)
- 9 Burdock seeds are spiny, so they can stick to animals' fur. (✓)
(Cairo 2023)
- 10 Plants' stems absorb oxygen gas from the air. (X)
(Damietta 2023)
- 11 Carbon dioxide gas is one of the plant needs that helps it grow and survive. (✓)
(Dakahlia 2024)
- 12 The soil is not from the basic needs for the plant. (✓)
(Cairo 2023)
- 13 The transport system of plants does the same function of the circulatory system in humans. (✓)
(Ministry Models)
- 14 Veins carry the blood rich in oxygen and nutrients. (X)
(Cairo 2023)
- 15 In many plants, flowers are responsible for reproduction. (✓)
(Dakahlia 2024)
- 16 Air enters plants through their roots. (X)
(Giza 2024)
- 17 Plants' seeds are formed inside the flowers. (✓)
(Sohag 2024)

Q3. Complete the following sentences:

- 1 In plants' leaves, light energy is converted into chemical energy during the photosynthesis process. (Menoufia 2023)
- 2 Inside the green plant, sunlight allows carbon dioxide to combine with water that's absorbed from the soil by the plant's root. (Behira 2023)
- 3 Some seeds can be transported from one place to another by floating on water, such as coconut seeds or traveling by wind, such as maple (dandelion) seeds. (Qalyoubia 2023)
- 4 There are three types of vessels in the human circulatory system, which are arteries, veins, and blood capillaries. (New Cairo 2023)
- 5 The stem carries water and nutrients from the roots to the leaves of the plant. (Luxor 2023)
- 6 The photosynthesis process happens in the plant's leaves. (Giza 2023)
- 7 Plants produce oxygen gas and sugar during the photosynthesis process. (New Cairo 2023)
- 8 The nutrients and oxygen are transported through the human blood to the body cells by the circulatory system. (Alex. 2024)
- 9 Trees and other plants make food through the photosynthesis process (Alex. 2023)
- 10 Traveling by wind and floating on water are ways of seed dispersal. (Dakahlia 2023)
- 11 Arteries carry the blood rich in oxygen and nutrients from the heart to all body parts. (Gharbia 2024)
- 12 Veins carry the blood that contains carbon dioxide gas from all body parts to the heart. (Heliopolis 2023)
- 13 Veins return the blood that contains carbon dioxide gas back to the heart. (Cairo 2024)
- 14 Arteries carry the blood rich in oxygen and glucose from the heart to the organs. (Dakahlia 2024)
- 15 Flowers are the reproductive parts of many plants. (Qalyoubia 2024)

Q4. Write the scientific term:

- 1 It's a system of tubes through which water, nutrients, and plant food are carried all over the plant. (Plant transport system (Vascular system))
(Cairo 2024)
- 2 They're vessels in the plant through which water and nutrients move up from the roots to the leaves. (Xylems)
(Menofia 2024)
- 3 It's a gas taken from the air by the leaves to help the plant make its own food. (Carbon dioxide gas)
(Gharbia 2024)
- 4 It's a part of the plant that carries water and nutrients from the roots to the leaves. (Stem)
(Cairo 2023)
- 5 It's the gas released from plants during the photosynthesis process. (Oxygen gas)
(Damietta 2023)
- 6 It's the process by which plants make their own food using the energy of the sunlight. (Photosynthesis)
(Aswan 2023)
- 7 They're parts of the plant that are responsible for reproduction. (Flowers)
(Cairo 2024)
- 8 It's a part of plant that carries water from the roots to the leaves. (Stem)
(Gharbia 2024)

Q5. Cross out the odd word:

- 1 Roots – Stems – Leaves – Sunlight (Cairo 2024)
- 2 Carbon dioxide gas – Water – Oxygen gas – Nutrients (Giza 2023)

Q6. Give reasons for:

- 1 Seeds of maple or dandelion plants can disperse through wind.
(Fayoum 2023)

Because they are light seeds.

- 2 A farmer found seeds that are not from the seeds of his farm.

(Cairo 2023)

Due to seed dispersal (by water – wind – sticking to animals' fur or humans' clothes – or seeds coming out with animals' stool).

- 3 The circulatory system has an important role for humans to survive.

(Menofia 2023)

Because it transports oxygen and nutrients through the blood to all body parts.

- 4 Roots have an important role in the photosynthesis process of plants.

(Sohag 2024)

Because the roots help the plant to absorb water and nutrients from the soil.

- 5 The photosynthesis process is important for plants to survive. (Cairo 2023)

Because it helps plants make their own food.

- 6 Burdock seeds can stick to animals' fur.

(Cairo 2024)

Because they are spiny seeds (Because they have spines).

- 7 Food is very important for humans.

(Alex. 2024)

To get energy to grow and survive, as they can't make their own food.

- 8 Xylem vessels are important for the plant.

(Giza 2023)

Because they transport water and nutrients from the roots to the plant's leaves.

Q7. What happens if:

- 1 We put a seed of bean in wet soil for many days?

(Giza 2023)

It will germinate and grow well.

- 2 We put a green plant in a dark room for many days?

(Cairo 2023)

The plant can't make its own food during the photosynthesis process. Its green leaves change into weak pale, green leaves, then it dies.

- 3 We remove the flowers of a plant?

(Menofia 2023)

The plant can't produce seeds that help it to reproduce.

Concept 1.2



1.2

Q1. Choose the correct answer:

- Secondary consumers can eat only. (Cairo 2023)
a. decomposers b. producers
c. primary consumers d. tertiary consumers
- Plants are considered because they absorb sunlight to make their own food. (Banha 2023)
a. producers b. consumers
c. decomposers d. nonliving things
- The leaves of green plants absorb the sunlight to combine water with to produce their own food. (Giza 2023)
a. oxygen gas b. soil
c. carbon dioxide gas d. roots
- is the main source of energy for all living organisms. (Alex. 2023)
a. Food b. The moon c. Water d. The Sun
- Wind plays an important role in dispersing seeds. (Giza 2023)
a. small, light b. big, heavy c. sticky d. floating
- Glucose sugar is transported from the leaves to other parts of the plant through the (Alex. 2023)
a. xylem b. phloem c. roots d. stems
- A caracal obtains its energy by eating (Aswan 2023)
a. sharks b. grass c. mice d. butterflies
- The first link in any food chain is the (Alex. 2023)
a. consumers b. producers c. decomposers d. food web
- In a plant's leaves, light energy is converted into energy during the photosynthesis process. (Damietta 2023)
a. sound b. electrical c. chemical d. kinetic
- Plants can make their own food through the process. (Alex. 2023)
a. breathing b. photosynthesis c. digestion d. reproduction

- 11 A lion is considered a (Alex. 2024)
 a. producer b. grass-eater c. meat-eater d. decomposer
- 12 All the following are consumers, except (Alex. 2024)
 a. hawks b. insects c. grass d. rabbits
- 13 One of the ways of seed dispersal is floating on water, as in
 a. burdock seeds b. tomato seeds
 c. dandelion seeds d. coconut seeds (Suez 2023)
- 14 Which of the following living organisms can make their own food?
 a. Hawks b. Mice c. Pine trees d. Caracals
 (Cairo 2023)
- 15 Many insects are considered (Giza 2024)
 a. producers b. decomposers
 c. primary consumers d. secondary consumers
- 16 Organisms that break down dead animals and plants are called
 a. decomposers b. consumers c. prey d. producers
 (Gharbiya 2023)
- 17 decompose the remains of dead organisms into nutrients.
 a. Bacteria and butterflies b. Fungi and locusts
 c. Worms and butterflies d. Bacteria and fungi
 (Qalyoubia 2024)
- 18 Maple seeds travel by wind because they are (Cairo 2023)
 a. light seeds b. spiny seeds c. heavy seeds d. smooth seeds
- 19 Decomposers always the soil. (Damietta 2023)
 a. pollute b. damage c. benefit d. harm
- 20 All the following ways help plants disperse their seeds, except (Qalyoubia 2023)
 a. water b. air c. animal bodies d. sunlight
- 21 The final link in any food chain is the (Alex. 2023)
 a. consumer b. producer c. decomposer d. food web

- 22** In a food chain, the energy transfers from (Dakahlia 2023)
- a. a predator to prey b. a producer to a producer
c. prey to a predator d. a consumer to a producer
- 23** Wind plays an important role in dispersing seeds. (Cairo 2023)
- a. small, light b. big, heavy c. sticky d. floating
- 24** Food webs show the interactions between (Fayoum 2023)
- a. few nonliving things b. many nonliving things
c. few living organisms d. many living organisms
- 25** Hawks get their energy by eating (Giza 2023)
- a. plants only b. animals only
c. plants and animals d. nonliving things
- 26** All the following are considered producer organisms, except
- a. grass b. hawks c. algae d. trees

(School Book)

Q2. Put (✓) or (X):

- 1 All living organisms depend on each other for getting energy. (✗)
(School Book)
- 2 Food and oxygen provide the body with the needed energy. (✓)
(Alex. 2023)
- 3 The first link in any food chain is a consumer. (✗)
(Giza 2023)
- 4 Producers need consumers to live and grow. (✗)
(Giza 2023)
- 5 Potato plants have tuber stems. (✓)
(Cairo 2024)
- 6 Food chains start with decomposers. (✗)
(Giza 2023)
- 7 Phloem transports food materials from leaves to other parts of the plant. (✓)

(Giza 2023)

- 8 All living organisms don't need energy to survive. (Giza 2023) (X)
- 9 The Sun produces energy that decomposers use to make their food. (Cairo 2024) (X)
- 10 A plant is fixed in the soil by the help of its roots. (Cairo 2023) (✓)
- 11 Recycling nutrients back to the ecosystem is the main function of the consumers. (Gharbia 2023) (X)
- 12 A hawk can get its needed energy directly by eating beetles. (X) (Alex. 2023)
- 13 Decomposers have a role in the ecosystem. (Helwan 2024) (✓)
- 14 Producers and consumers use carbon dioxide gas for making their food. (Giza 2023) (X)
- 15 Xylem is important for plants to transfer water from the plant's roots to the leaves. (Dakahlia 2023) (✓)
- 16 An ecosystem consists of living organisms only. (School Book) (X)
- 17 Humans can eat plants and animals. (Cairo 2023) (✓)
- 18 A food web is the interconnected food chains that show many different feeding relationships. (Gharbia 2023) (✓)
- 19 There is no interaction between the components of an ecosystem. (Menofia 2023) (X)
- 20 All plants need the same way to disperse their seeds. (Giza 2023) (X)
- 21 The chlorophyll in plants' roots absorbs sunlight. (Cairo 2023) (X)
- 22 Hawks do not eat some types of food, like plant leaves. (✓) (Cairo 2024)
- 23 A plant's stem has hairs that absorb oxygen gas from the air. (X) (Damietta 2023)
- 24 Stomata allow gases to move into and out of the plant. (✓) (Minia 2023)

Q3. Write the scientific term:

- 1 It transfers between the animals in a food web to help them survive.
(Energy)
(Damietta 2023)
- 2 It's the gas that is produced from the photosynthesis process. (Oxygen)
(Damietta 2023)
- 3 It is a model that shows a linear set of feeding relationships and energy flow between living organisms. (Food chain)
(Helwan 2024)
- 4 It's a place that provides food, water, and shelter to all living organisms that live in it. (Ecosystem)
(Cairo 2023)
- 5 It's the gas that is present in air and necessary for the formation of plant food. (Carbon dioxide)
(Ismailia 2023)
- 6 It is found in a plant's leaves that gives them green color and absorbs energy from the sunlight. (Chlorophyll)
(Alex. 2023)
- 7 It's a community that contains living organisms and nonliving things. (Ecosystem)
(Cairo 2024)
- 8 They are consumers which feed on secondary consumers. (Tertiary consumer)
(New Cairo 2023)
- 9 It's a group of living organisms that can live on decaying dead organisms. (Decomposers)
(Cairo 2023)
- 10 It's the consumer that hunts and eats another animal. (Predator)
(Beheria 2024)

Q4. Complete the following sentences:

- 1 Bacteria and fungi are considered decomposers, so they can feed on dead organisms.
(Alex. 2023)
- 2 When living organisms die, their energy is returned to the soil.
(Sohag 2024)
- 3 The interaction among many food chains is known as food web.
(Suez 2023)
- 4 In any food chain, plants are considered producers.
(Cairo 2023)
- 5 Plants produce glucose sugar and oxygen gas during the photosynthesis process.
(Cairo 2023)
- 6 Humans can eat producers and primary consumers.
(Cairo 2023)

Q5. Give reasons for:

- 1 Life on Earth without plants would be impossible. (Dakahlia 2024)
Because during the photosynthesis process, plants produce oxygen gas that animals and people need to breathe.
- 2 Green plants are considered producer organisms. (Cairo 2024)
Because they can make their own food through the photosynthesis process.
- 3 Sunlight is important for all living organisms. (Damietta 2023)
Because it is absorbed by the plants' leaves to make their own food and grow, then humans and animals eat these plants.
- 4 Chlorophyll has an important role in the photosynthesis process. (Cairo 2023)
Because it absorbs the energy from the sunlight that helps the plant make the photosynthesis process.

- 5 Soil fertility depends on decomposers.

(Beheira 2024)

Because they return nutrients to the ecosystem by decomposing dead organisms that increase soil fertility.

- 6 Snakes are considered consumers.

(Alex. 2023)

Because snakes can't make their own food, so they eat other animals to get energy.

Q6. What happens if:

- 1 A hawk is placed in an ecosystem that doesn't contain any living organisms except plants?

(Cairo 2023)

The hawk moves away to search for food in another ecosystem.

- 2 All primary consumers disappear from a certain food chain?

(Giza 2023)

The secondary consumers will move away to another place to search for food, or they will die.

Q7. Form food chains by using the following organisms:

- 1 Frog – Grass – Locust – Snake – Owl

(Alex. 2024)

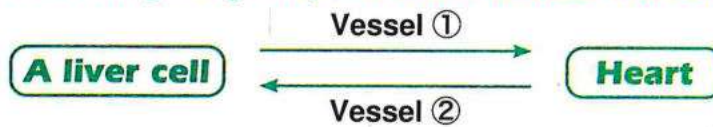
Grass → Locust → Frog → Snake → Owl

- 2 Frog – Grass – Snake – Grasshopper – Hawk

(Giza 2023)

Grass → Grasshopper → Frog → Snake → Hawk

1 (A) Study the following diagram, and then choose the correct answer:



- The vessel number ① represents
 (a) xylem (b) a vein (c) an atrium (d) an artery
- The vessel number ② carries
 (a) wastes and oxygen (b) carbon dioxide gas and wastes
 (c) nutrients and oxygen (d) water and wastes
- Blood moves in direction through vessel ① and vessel ②.
 (a) one (b) two (c) three (d) four

(B) Give a reason for:

- Vine tree and pine tree have different kinds of stems.

- Plants depend on humans and animals to make their own food during the photosynthesis process.

2 (A) Choose from column (A) what suits it in column (B):

Column (A)	Column (B)
1. Seeds are produced through	(a) germination process.
2. Seeds are transported from a place to another through	(b) reproduction process.
3. A seed grows and forms a new plant through	(c) seed dispersal process.

1. 2. 3.

(B) Write the scientific term:

- It pumps blood to the human body parts and receives it again. (.....)
- A plant part that anchors the plant in the soil. (.....)

3 (A) Cross out the odd word:

1. Fats – Starches – Oxygen gas – Sugars (.....)
2. Arteries – Veins – Blood capillaries – Atria (.....)
3. Roots – Stems – Blood – Leaves (.....)

(B) What happens if:

1. A plant is placed in a dark room for many days?

.....

.....

.....

2. There are no stomata on plants' leaves?

.....

.....

.....

4 (A) Complete the following sentences:

1. Green plants can make their own food through the process.
2. A growing seed in a wet paper towel needs to be transferred to to complete its growth.
3. Most flowers have stems.

(B) "A farmer found burdock seeds and maple seeds that weren't from his farm.", Explain at least two different ways that help each type of those seeds to reach the farm.

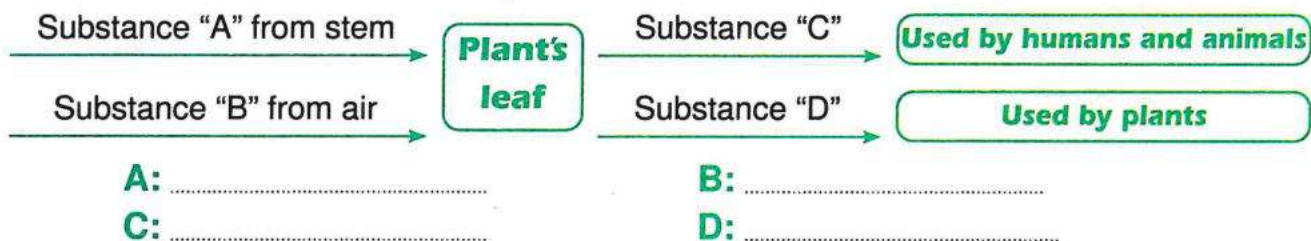
.....

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.....

- 1 (A) Replace the substances "A", "B", "C" and "D" by the following words:
(Oxygen gas – Water – Glucose sugar – Carbon dioxide gas)



(B) What happens if:

- Plants' leaves don't have chlorophyll?
-

- 2 (A) The opposite figure shows a flower placed in a cup containing a red-colored water, Choose the correct answer:

- The color of of the flower turns into red.
 (a) phloem only (b) xylem only (c) xylem and leaves
- There are small tubes called that connect the flower's leaves to the stem.
 (a) xylem (b) veins (d) chlorophyll
- What happens to the water level in the cup over time?
 (a) It goes up.
 (b) It stays the same.
 (c) It goes down.



(B) Give a reason for:

- Sunlight is a basic need for plants to grow and survive.
-
-

- Flowers are the reproductive parts of many plants.
-
-

3 (A) Choose from column (A) what suits it in column (B):

Column (A)	Column (B)
1. Dandelion seeds	(a) are dispersed by sticking to animals' fur.
2. Coconut seeds	(b) are dispersed by wind.
3. Burdock seeds	(c) are dispersed by coming out with animals' stool.
4. Apple seeds	(d) are dispersed by floating on water.

1. 2. 3. 4.

(B) Compare between them plants and animals according to the way of getting their food:

Plants	Animals
.....	
.....	
.....	

4 (A) Complete the following sentences:

1. Stomata are present on plant's to allow air to pass through them.
2. Shrubs have stems.
3. are tiny vessels that connect arteries to veins.

(B) Mention one importance of each of the following:

1. Plant's leaves.

.....

2. Root hairs.

.....

1 (A) Look at the following figure, then choose the correct answer:

1. The dark objects in the center of the sunflower are called

- (a) stems (b) seeds (c) fruits

2. The main function of this flower is

- (a) making the plant's food
(b) producing seeds
(c) transporting materials

3. Sunflowers have a/an stem.

- (a) tuber (b) runner (c) upright



(B) Mention one importance of each of the following:

1. Plant's stem.

.....
.....
.....

2. Chlorophyll.

.....
.....
.....

2 (A) Complete the following sentences:

1. Pine trees have leaves that look like

2. The heart consists of two and two

3. Water and nutrients are carried from the plant's to its leaves through

(B) Put (✓) or (X):

- Air enters plants through their roots.

()

3 (A) Correct the underlined words:

1. Sunlight is not important for plants in their initial growth. (.....)
2. Water provides the plant with the needed energy to grow. (.....)
3. Vine tree has wood stem. (.....)

(B) Mention one example for each of the following:

1. Seeds that can be dispersed by wind.

.....

.....

.....

2. Seeds that can be stuck to animals' fur.

.....

.....

.....

4 (A) Compare between:

Arteries	Veins
They carry blood rich in(1)..... gas and(2)..... from the(3)..... to(4)..... .	They carry blood rich in(5)..... gas and(6)..... from the(7)..... to(8)..... .

(B) Give a reason for:

1. Life on Earth without plants would be impossible.

.....

.....

.....

2. Roots have an important role for plants in the photosynthesis process.

.....

.....

.....

1 (A) Put (✓) or (X):

1. Xylem helps to carry water and nutrients downward through the plant's stem. ()
2. Plant's roots, stem and flowers have a role in the photosynthesis process. ()
3. **Water plays an important role in dispersing small and light seeds.** ()

(B) What happens if:

1. The stomata of a plant get closed for a long time?

.....

.....

.....

2. Burdock seeds don't have any spines?

.....

.....

.....

2 (A) Look at the following figures, then complete:

1. The seeds in figure (.....) can be dispersed by the animals.
2. The light seeds in figure (.....) can be dispersed by



Figure (1)



Figure (2)

(B) Mention the importance of:

1. Human circulatory system.

.....

.....

.....

2. Flowers.

.....

.....

.....

3 (A) Compare between:

Phloem	Xylem
They carry(1)..... which is type of(2)..... from the plant's(3)..... to(4)..... .	They carry(5)..... and(6)..... from the plant's(7)..... to its(8)..... .

(B) Mention the type of stem in each of the following:

- Potato plant. (.....)
- The trunk of a mango tree. (.....)

4 (A) Write the scientific term:

- A liquid substance that humans, animals and plants need to grow and survive. (.....)
- The parts of the plant where water combines with carbon dioxide to produce sugar and oxygen gas. (.....)

(B) What happens if:

- A plant can't get carbon dioxide from air?

.....

.....

.....

(C) Cross out the odd word:

- Roots – Flowers – Leaves – Stem (.....)
- Blood capillaries – Vein – Arteries – Heart (.....)

1 (A) Study the following food chain, then complete the sentences below:



1. Photosynthesis process is carried out by while process is carried out by bacteria.
2. Energy directly transfers from the to the mouse.
3. is a large meat-eating animal.

(B) Give a reason for:

- The waste material produced from millipedes is very important for the soil.

.....

.....

.....

2 (A) Compare between:

P.O.C	Prey	Predator
Definition		
		
		
		
		

(B) Cross out the odd word:

1. Bacteria – Locusts – Millipedes – Fungi (.....)
2. Insects – Alligators – Grasses – Birds (.....)
3. Eagle – Hawk – Rabbit – Caracal (.....)

3 (A) Choose the correct answer:

1. When a bird eats an insect, the
 - (a) bird is a prey
 - (b) bird is a primary consumer
 - (c) insect is a predator
 - (d) bird is a predator
2. Human gets energy indirectly from producers when he eats
 - (a) tomatoes
 - (b) chicken
 - (c) grapes
 - (d) bread
3. Many insects are considered as
 - (a) producers
 - (b) decomposers
 - (c) primary consumers
 - (d) secondary consumer

(B) Correct the underlined words:

1. In a food chain, the energy flows from a tertiary consumer to a secondary consumer. (.....)
2. Producers are the final link in any food chain. (.....)

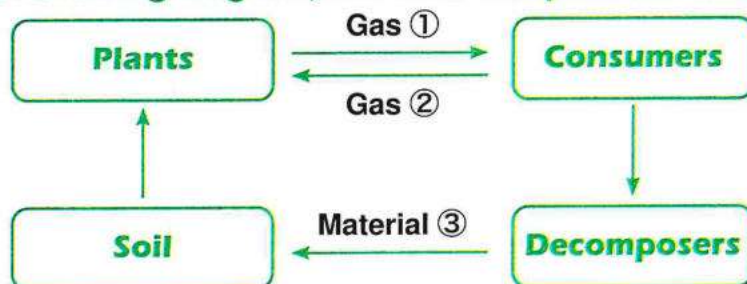
4 (A) Put (✓) or (X):

1. It is better for a predator to depend on only one species of prey. ()
2. Decomposers don't need energy to survive. ()

(B) Write the scientific term:

1. They are organisms that eat other living organisms to get their energy. (.....)
2. An area that provides food, water and shelter to all living organisms that live in it. (.....)
3. The interaction among many food chains. (.....)

1 (A) Study the following diagram, and then complete the sentences below:



1. The gas number ① is produced during process.
2. The gas number ② is produced during process.
3. The material number ③ is produced during process and this material is rich in

(B) Give a reason for:

- Decomposers play an important role in the ecosystem.

2 (A) Choose from column (A) what suits it in column (B):

Column (A)	Column (B)
1. Producers	(a) get energy by eating plants.
2. Herbivores	(b) get energy by eating another animals.
	(c) get energy directly from the sun.

1. 2.

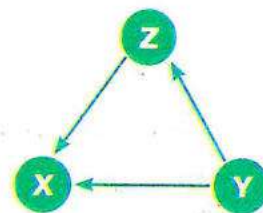
(B) Mention one example for each of the following:

1. An animal that gets energy by eating a hawk. (.....)
2. A way of seed dispersal for light seeds. (.....)
3. An ecosystem. (.....)

3 (A) Choose the correct answer:

1. What are the living organisms which the letter X, Y and Z represent in the opposite diagram:

	X	Y	Z
(a)	Human	Rabbit	Carrot
(b)	Rabbit	Human	Carrot
(c)	Carrot	Rabbit	Human
(d)	Human	Carrot	Rabbit



2. occupy the second link in a food chain.

- (a) Plants (b) Decomposers
(c) Producers (d) Primary consumers

3. Energy directly flows from

- (a) an eagle to a mouse (b) a mouse to grasses
(c) a rabbit to a caracal (d) a hawk to a frog

(B) Compare between:

Food chain	Food web
.....	
.....	
.....	

4 (A) Put (✓) or (X):

1. An animal can be a prey and a predator in the same time. ()
2. Your body doesn't need energy during sleeping. ()

(B) Write the scientific term:

1. The group of living organisms that can make their own food. (.....)
2. The sugar manufactured inside plants during photosynthesis process. (.....)

(C) What happens to:

- The soil fertility when worms and millipedes living in it, disappear?

- 1 (A) Study the following figures, then answer the following questions:



Area (A)



Area (B)

1. In which area does the hawk have different resources of energy?

2. In which area the hawk may die? And why?

3. What happens to the energy inside the hawk's body when it dies?

(B) Complete the following sentences:

- The waste materials produced from worms and are rich in nutrients that increase the
- Human is considered as a organism.

2 Choose the correct answer:

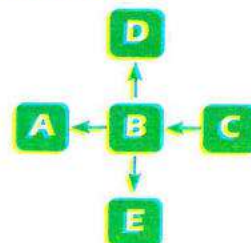
- The energy from the sun directly passes to
 (a) a mouse (b) a bean plant (c) a hawk (d) a worm
- In a food chain, could be preys for secondary consumers.
 (a) plants (b) primary consumers
 (c) decomposers (d) tertiary consumers
- All the following organisms are examples of decomposers, except
 (a) millipedes (b) fungi (c) bacteria (d) trees

(B) Write the scientific term:

- The first link in a food chain. (.....)
- The consumer that hunts and eats another animal. (.....)

3 (A) Study the opposite diagram, then complete the sentences below:

1. Letter (.....) represents a producer.
2. Letter (.....) represents a herbivore.



(B) Give a reason for:

1. Rabbits are considered as primary consumers.

.....

.....

2. Consumers depend on producers to get their energy.

.....

.....

(C) What happens to:

- The number of secondary consumers, when the numbers of primary consumers in an ecosystem increases?

.....

.....

4 (A) Compare between:

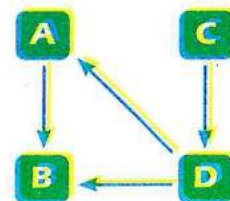
P.O.C	Producers	Decomposers
Definition		
Example		

(B) Form food chain by using the following organisms:

- Bacteria – Hawk – Eagle – Seeds – Squirrel

.....

1 (A) Study the following food web, and then complete the sentences below:



1. Letter (.....) represents a producer.
2. Letter (.....) represents a tertiary consumer.

(B) Give a reason for:

1. Soil fertility depends on decomposers.

.....

2. The sun is very important for all living organisms.

.....

3. Hawks depend on plants to get their energy.

.....

4. Humans need to eat some animals and plants.

.....

2 (A) Complete the following sentences:

1. and the we breathe provide us with needed energy.
2. consumers are known as herbivores.
3. We need energy during doing exercises than that we need during sleeping.
4. Birds are considered as that feed on

(B) Put (✓) or (X):

- Spiny seeds are dispersed by sticking to animals' fur and human's clothes. ()

3 (A) Choose the correct answer:

1. All the following are sources of food for a primary consumer, except
 (a) seeds (b) grasses (c) beetles (d) plants' leaves
2. The energy in glucose present in plants' leaves directly flows to
 (a) a deer (b) a shark (c) a snake (d) an eagle
3. Predators could be
 (a) producers (b) primary consumers
 (c) decomposers (d) secondary consumers

(B) What happens if:

1. All primary consumers disappear from a food chain?

2. Sunlight can't reach the Earth's surface?

4 (A) Cross out the odd word:

1. Rabbit – Mouse – Duck – Caracal (.....)
2. Fox – Hawk – Bacteria – Snake (.....)

(B) Write the scientific term:

1. The gas released from photosynthesis process. (.....)
2. The main source of energy for all living organisms on Earth. (.....)
3. It is a model that shows how the energy flows from one organism to another in an ecosystem. (.....)

حمل الآن

مجاناً وحصرياً

المراجعة رقم (3)

اختبار شهر اكتوبر

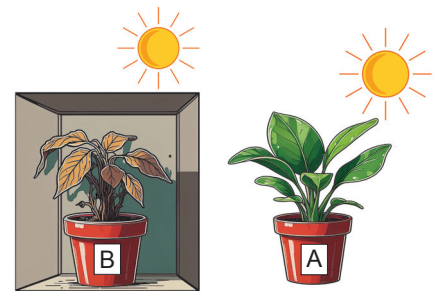


1 A) Complete the following sentence:

- The supports the plant leaves and flowers.

B) Answer the following questions:

- 1 In front of you is a plant whose shape has changed from picture (A) to picture (B). What is the reason for that?



- 2 Compare between the types of consumers in a food chain.

.....

.....

.....

- 3 The circulatory system is similar to the plant vascular system. **Explain.**

.....

.....

2 A) Put (✓) or (X):

- The xylem carries glucose from the leaves to the rest of the plant. ()

B) Mention the importance or function of each of the following:

- 1 Decomposers

.....

- 2 Arteries

.....

3 A) Choose the correct answer:

- increase the amount of water and nutrients absorbed by a plant.
- a) Seeds b) Root hairs c) Xylem d) Leaves

B) Give a reason for each of the following:

- 1 Seeds of dandelion plants can disperse through wind easily.

.....

- 2 Consumers depend on producers to get their energy.

.....

1 A) Choose the correct answer:

- The plant absorbs gas during the process of photosynthesis.
 a) oxygen b) carbon dioxide c) nitrogen d) helium

B) Give a reason for each of the following:

- 1 Soil is not one of the basic needs of plants.

.....

- 2 Lion is considered a predator.

.....

- 3 Photosynthesis process is important for plants to survive.

.....

2 A) Write the scientific term:

- It is a model of several interconnected food chains among living organisms within an ecosystem. (.....)

B) What happens if ...?

- 1 All primary consumers disappear from a food chain.

.....

- 2 Xylem is removed from the plant structure.

.....

3 A) Complete the following sentence:

- There are holes spread on the plant's leaves called

B) Define:

- 1 Plant reproduction

.....

- 2 Ecosystem

.....

1 A) Cross out the odd word:

- Lion – Tiger – Shark – Rabbit

B) What is meant by ...?

- 1 Veins.

.....

- 2 Producers

.....

- 3 Flowers

.....

2 A) Correct the underlined word in the following sentence:

- There are smaller vessels of xylem that connect the root to the leaves.

B) Answer the following questions:

- 1 Form a food chain using the following organisms:

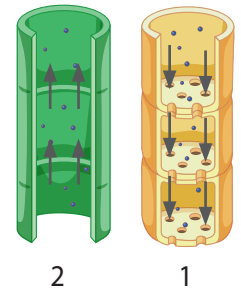
(Grasshopper – Bird – Grass – Hawk – Snake)

.....

- 2 Look at the opposite figures, then answer:

a) Xylem vessel represents the shape number

b) Phloem vessel represents the shape number



3 A) Choose the correct answer:

- The heart in the human circulatory system consists of
 - a) two arteries and two ventricles
 - b) two veins and two atria
 - c) two atria and two ventricles
 - d) two ventricles and two veins

B) Explain:

- 1 Soil fertility depends on decomposers.

.....

- 2 The presence of stomata on the surface of plant's leaves.

.....

1 A) Write the scientific term:

- It is the transportation of the seeds from one place to another. (.....)

B) Answer the following questions:

1 Look at the opposite figures, then answer:

- a) What are the types of the tree leaves in front of you?

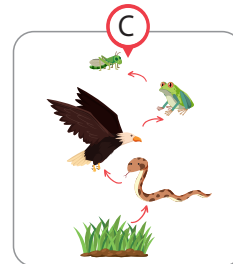
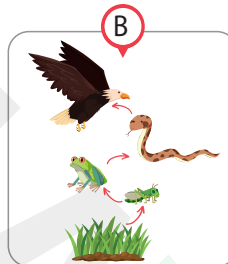
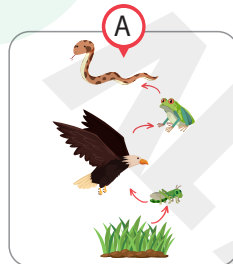
.....

- b) Mention the function of the leaves.

.....



2 Look at the following ecosystem, then circle the correct food chain that represents this environment.



.....

2 A) Put (✓) or (X):

- The energy inside living organisms' bodies disappear after death. ()

B) What happens if ...?

1 Plants have no stems.

.....

2 A celery stalk is placed in a glass of colored water.

.....

3 A) Complete the following sentence:

- Blood moves in the arteries and veins in direction.

B) Give a reason for each of the following:

1 There is no life on Earth in the absence of plants.

.....

2 Animals eat different types of food.

.....

1 A) Choose the correct answer:

- When the decomposer disappears from a habitat,
 - a) they will produce their own food using light energy
 - b) they will move to another ecosystem
 - c) they will recycle the nutrients back into the ecosystem
 - d) the dead bodies will cover this habitat

B) Give a reason for each of the following:

- 1 Phloem plays an important role for plants.

.....

- 2 The xylems in plants are one-way vessels.

.....

- 3 Hawk is a meat-eating animal.

.....

2 A) Complete the following sentence:

- Shrubs have stem, while have climber stem.

B) Mention the importance or function of each of the following:

- 1 Chlorophyll

.....

- 2 Heart

.....

3 A) Put (✓) or (X):

- Millipedes are considered decomposer organisms. ()

B) What is meant by ...?

- 1 Food chain

.....

- 2 Plant vascular system

.....

1 A) Complete the following sentence:

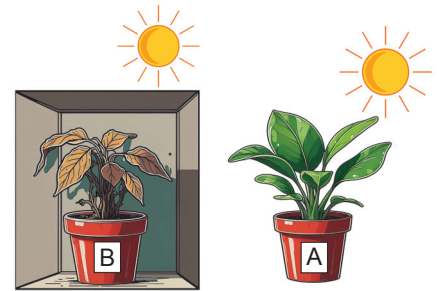
- The **stem** supports the plant leaves and flowers.

B) Answer the following questions:

- 1 In front of you is a plant whose shape has changed from picture (A) to picture (B). What is the reason for that?

- Due to the absence of sunlight.

- 2 Compare between the types of consumers in a food chain.



Primary consumers	Secondary consumers	Tertiary consumers
They are animals that eat producers.	They are animals that eat primary consumers.	They are animals that eat secondary consumers.

- 3 The circulatory system is similar to the plant vascular system. **Explain.**

- Both contain vessels that:
 - 1- Transport materials in one-way direction.
 - 2- Transport water, nutrients, and gases.

2 A) Put (✓) or (X):

- The xylem carries glucose from the leaves to the rest of the plant.

(X)

B) Mention the importance or function of each of the following:

- 1 Decomposers

- They recycle nutrients back into the ecosystem and increase soil fertility.

- 2 Arteries

- They carry blood rich in oxygen and nutrients from the heart to all the body cells.

3 A) Choose the correct answer:

- increase the amount of water and nutrients absorbed by a plant.

a) Seeds b) Root hairs c) Xylem d) Leaves

B) Give a reason for each of the following:

- 1 Seeds of dandelion plants can disperse through wind easily.

- Because they are light seeds.

- 2 Consumers depend on producers to get their energy.

- Because consumers can't make their own food.

1 A) Choose the correct answer:

- The plant absorbs gas during the process of photosynthesis.
a) oxygen b) carbon dioxide c) nitrogen d) helium

B) Give a reason for each of the following:

- 1 Soil is not one of the basic needs of plants.
 - Because some plants don't need soil to grow, such as plants that grow in water.
- 2 Lion is considered a predator.
 - Because it eats (hunts) another animal to get energy.
- 3 Photosynthesis process is important for plants to survive.
 - Because it helps the plant to make its own food.

2 A) Write the scientific term:

- It is a model of several interconnected food chains among living organisms within an ecosystem. (Food web)

B) What happens if ...?

- 1 All primary consumers disappear from a food chain.
 - The secondary consumers will move to another ecosystem to search for food or they will die.
- 2 Xylem is removed from the plant structure.
 - Water and nutrients won't be transferred to the leaves.

3 A) Complete the following sentence:

- There are holes spread on the plant's leaves called stomata.

B) Define:

- 1 Plant reproduction
 - It is the process of making new plants.
- 2 Ecosystem
 - It is a community that contains living organisms and nonliving things that interact with each other.

1 A) Cross out the odd word:

- Lion – Tiger – Shark – **Rabbit**

B) What is meant by ...?

1 Veins.

- They are blood vessels which carry blood rich in carbon dioxide gas from all body parts back into the heart.

2 Producers

- They are organisms that can make their own food and don't feed on other plants or animals.

3 Flowers

- They are the reproductive parts of many plants.

2 A) Correct the underlined word in the following sentence:

- There are smaller vessels of xylem that connect the root to the leaves.

stem

B) Answer the following questions:

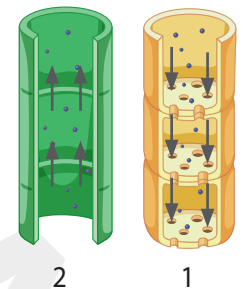
1 Form a food chain using the following organisms:

(Grasshopper – Bird – Grass – Hawk – Snake)

- **Grass – Grasshopper – Bird – Snake – Hawk**

2 Look at the opposite figures, then answer:

- Xylem vessel represents the shape number 2.
- Phloem vessel represents the shape number 1.



3 A) Choose the correct answer:

- The heart in the human circulatory system consists of
 - two arteries and two ventricles
 - two veins and two atria
 - two atria and two ventricles**
 - two ventricles and two veins

B) Explain:

1 Soil fertility depends on decomposers.

- Because decomposers return nutrients of dead organisms back to the soil.

2 The presence of stomata on the surface of plant's leaves.

- To allow gases to move into and out of the plant.

1 A) Write the scientific term:

- It is the transportation of the seeds from one place to another. (Seed dispersal)

B) Answer the following questions:

1 Look at the opposite figures, then answer:

a) What are the types of the tree leaves in front of you?

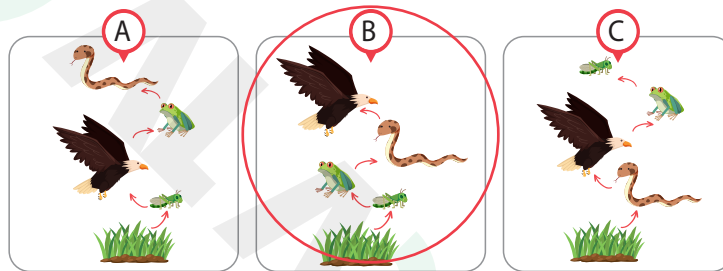
- Number (1): Narrow and needle-like, while
- Number (2): Flat and wide.



b) Mention the function of the leaves.

- They make food for the plant through photosynthesis process.

2 Look at the following ecosystem, then circle the correct food chain that represents this environment.



2 A) Put (✓) or (X):

- The energy inside living organisms' bodies disappear after death. (X)

B) What happens if ...?

1 Plants have no stems.

- Water and nutrients will not be carried from the roots to the leaves.

2 A celery stalk is placed in a glass of colored water.

- The xylem color changes to the color of the water in the cup.

3 A) Complete the following sentence:

- Blood moves in the arteries and veins in **one** direction.

B) Give a reason for each of the following:

1 There is no life on Earth in the absence of plants.

- Because plants produce oxygen gas during photosynthesis process which is important for all living organisms to breathe.

2 Animals eat different types of food.

- To get energy as they can't produce their own food.

1 A) Choose the correct answer:

- When the decomposer disappears from a habitat,
 - a) they will produce their own food using light energy
 - b) they will move to another ecosystem
 - c) they will recycle the nutrients back into the ecosystem
 - d) the dead bodies will cover this habitat

B) Give a reason for each of the following:

- 1 Phloem plays an important role for plants.
 - Because it transports glucose sugar from the leaves to all other parts of the plant.
- 2 The xylems in plants are one-way vessels.
 - Because they carry water and nutrients from the roots to the leaves.
- 3 Hawk is a meat-eating animal.
 - Because it eats snakes, fish, rabbits, and mice.

2 A) Complete the following sentence:

- Shrubs have **wooden** stem, while **vines** have climber stem.

B) Mention the importance or function of each of the following:

- 1 Chlorophyll
 - It gives the leaves their green color and absorbs energy from the sunlight.
- 2 Heart
 - It pumps blood to all the body parts and receives it again.

3 A) Put (✓) or (X):

- Millipedes are considered decomposer organisms.

(✓)

B) What is meant by ...?

- 1 Food chain
 - It is a model that shows how energy passes from one organism to another.
- 2 Plant vascular system
 - It is a system of vessels that transport water, nutrients, and plant food (glucose) among the plant parts.

حمل الآن

مجاناً وحصرياً

المراجعة رقم (4)

اختبار شهر اكتوبر



Question 1: write the scientific term of each of the following:

- 1 A gas taken from the air by leaves to help the plant to make its own food . ()
- 2 A liquid substance that plants, animals and human need to survive. ()
- 3 Transferring of seeds from a place to another ()
- 4 It is the primary source of energy for all living organisms on the Earth ()
- 5 A group of living organisms that can produce their own food ()
- 6 The animal that is eaten by another animal ()
- 7 It is a model that shows how energy flows from one organism to another in an ecosystem ()
- 8 The process that takes place inside plants through which we can get oxygen ()
- 9 A group of living organisms that can live on decaying dead organisms ()
- 10 It is a process through which decomposers can recycle nutrients back into the soil ()
- 11 A community that contains living organisms and nonliving things ()
- 12 A substance that is produced from the plant during photosynthesis process and provides it with its needed energy. ()
- 13 It is found in the plant's leaves that gives them the green color and absorbs energy from the sunlight ()

Question 2: Choose the correct answer:**Concept (1)
Lesson 1**

- 1 The of plant absorb water and nutrients from the soil.

a roots**b** stems**c** leaves**d** flowers
- 2 Humans and animals need to eat to get

a oxygen gas.**b** carbon dioxide gas.

c energy**d** soil

- 3 Plants make their food by a process known as
 - a respiration.
 - b photosynthesis.
 - c absorption.
 - d digestion.
- 4 and are from the plant needs that help it make photosynthesis process
 - a Oxygen water
 - b Water earthworms
 - c Sunlight-carbon dioxide
 - d Nutrients - oxygen
- 5 Plants and humans are similar in some of their basic needs to survive such as
 - a sunlight and rocks.
 - b carbon dioxide and soil.
 - c water and air.
 - d soil and water
- 6 Plants take..... from the air to make its food.
 - a water
 - b oxygen gas
 - c carbon dioxide gas
 - d sugar
- 7 All the following are plant basic needs to make its own food, except
 - a water.
 - b air.
 - c sunlight.
 - d rocks
- 8 Which of the following sentences is wrong?
 - a Plants need sunlight to grow.
 - b Plants roots absorb water from the soil.
 - c Plants make their own food by respiration process.
 - d Plants make their own food in their leaves.
- 9 Water and nutrients are carried from the roots to the leaves through the
 - a stem.
 - b soil.
 - c fruits.
 - d flowers.
- 10 In photosynthesis process, plant produces to get energy.
 - a oxygen gas
 - b sugar
 - c carbon dioxide
 - d water

Lesson 2

- 11 When the plant seed begins to grow and makes sprouts, this process is called
 - a respiration.
 - b germination.
 - c absorption.
 - d reproduction.

- 12 If we put a bean seed in a....., it may germinate.
- a dry paper towel b wet paper towel
c plastic plate d dry soil
- 13 In the presence of water, seeds can germinate at the beginning of growth without the need of
- a soil. b rocks. c insects. d dry paper towel.
- 14 Sunlight and carbon dioxide gas are collected by plant's to make its own food..
- a roots b stems c leaves d flowers
- 15 The plant producesthrough photosynthesis process that gives it the needed energy to grow
- a oxygen gas b water
c carbon dioxide gas d sugar
- 16 Without the plants can't grow well.
- a insects b rocks c sunlight d moonlight
- 17 The roots of a plant absorb from the soil to help it grow.
- a oxygen gas b carbon dioxide gas
c sugar d water

lesson 3

- 18 The plant's anchor it in the soil.
- a leaves b stems c roots d flowers
- 19 There are in the plant's roots that help the plant to get more water and nutrients
- a vessels b root hairs c stomata d flowers
- 20 The tubes that are responsible for moving water and nutrients up the plant's stem are called
- a roots. b xylem. c leaves. d flowers
- 21 plant has climb stem
- a Potato b Tomato c Vine d Pine

- 22 The kind of stems that extend underground are called stems
 a climb b tuber c runner d wood
- 23 Potato plant has stem
 a upright b climb c tuber d runner
- 24 Stomata are present on plant's to allow air to pass through them
 a roots b stems c leaves d flowers
- 25 can make their own food.
 a Plants only b Animals only
 c Humans only d Plants and some animals
- 26 tree has narrow leaves.
 a Potato b Pine c Acacia d Grapes
- 27 The green plants can make their own food through
 a roots. b stems.
 c leaves. d flowers.
- 28 help the plant's leaves to get water and nutrients from the soil
 a Roots only b Xylem only
 c Roots and xylem d Xylem and stomata
- 29 All the following parts are important for plants to make photosynthesis process, except
 a roots. b stems. c leaves. d flowers
- 30 The green color of plant's leaves is due to the presence of.....
 a xylem. b phloem.
 c chlorophyll. d stomata
- 31 Food materials are transported from the leaves to other parts of the plant through
 a xylem. b phloem.
 c chlorophyll. d stomata

- 32 Animals and humans need to breathe
- a oxygen gas b carbon dioxide gas
c water vapor d sugar
- 33 Green plants produce all the following substances during photosynthesis process, except
- a oxygen gas. b starches.
c carborne dioxide gas. d fats

lesson 4

- 34 The human system that moves blood through the body is called system
- a digestive b respiratory
c circulatory d nervous
- 35 Air enters the human body through the
- a nose only. b mouth only.
c nose and mouth. d mouth and stomach.
- 36 The human circulatory system consists of
- a lungs, heart and blood. b heart, blood vessels and blood.
c blood vessels and stomach. d heart and pancreas.
- 37 carry blood which is rich in oxygen and glucose from the heart to the body cells.
- a Arteries b Lungs and veins
c Veins d Brain and veins
- 38 Blood rich in carbon dioxide gas returns back to the heart through
- a arteries. b veins. c lungs. d xylem
- 39system in plants consists of tubes that water and nutrients move through it.
- a Digestive b Respiratory
c Transport d Nervous
- 40 The heart in the human circulatory system consists of
- a two arteries and two ventricles. b two atria and two ventricles.
c two veins and two atria. d two ventricles and two veins.

- 41 Glucose sugar is transported from the leaves to other parts of the plant through.....
- a xylem. b phloem. c roots. d stems.
- 42 in the leaves allow air to enter the plant.
- a Xylem b Phloem c Stomata d Chlorophyll
- 43 In plant's leaves, light energy is converted into..... energy during photosynthesis process
- a sound b electric c chemical d kinetic
- 44 Plants can produce new seeds by.....
- a roots. b leaves. c stems. d flowers
- 40 The movement of seeds from a place to another is called.....
- a seeds germination. b seeds dispersal.
c seeds reproduction. d seeds growth
- 41 All the following can help in seed dispersal, except.....
- a wind. b human and animals.
c water. d soil and sunlight
- 42 Maple seeds travel by wind because they are.....
- a light seeds. b spiny seeds.
c heavy seeds. d smooth seeds
- 43 Burdock seeds have spines, so they can.....
- a float on water. b stick to animal fur.
c travel by wind. d be eaten by animals
- 44 From the ways of seeds dispersal is floating on water as in
- a burdock seeds. b tomato seeds.
c dandelion seeds. d coconut seeds.

Concept (2)

- 45 Photosynthesis process, means
- a making glucose in the absence of light energy.
 - b making glucose in the presence of light energy.
 - c using glucose to produce energy.
 - d using salts to produce energy
- 46 If a spider eats a bee that feeds on a plant
- a both spider and bee are primary consumers.
 - b both spider and bee are secondary consumers.
 - c the bee is a secondary consumer.
 - d the spider is a secondary consumer
- 47 The predator that feeds on a living organism, may be to organism.
- a a decomposer
 - b a prey
 - c a producer
 - d a primary consumer
- 48 The model that shows many interactions between different types of living organisms is known as
- a food chain.
 - b food web.
 - c ecosystem.
 - d habitat
- 49 Plant-community ecologists do their studies and researches on
- a plants only.
 - b animals only.
 - c plants and animals.
 - d producers and consumers
- 50 If a plant doesn't disperse its seeds, so the number of this plant will
- a increase.
 - b decrease.
 - c not be affected
 - d be positively affected.
- 51 Rabbit can be eaten by all the following living organisms, except
- a hawk
 - b caracal
 - c grass
 - d deagle.

- 51 There is an energy flow between all the following two living organisms, except
- a a lion and a deer.
 - b a human and a fish.
 - c a tomato plant and a potato plant
 - d a hawk and a mouse
- 52 Leaves of green plants absorb the sunlight to combine water with to produce their own food
- a oxygen gas
 - b soil
 - c carbon dioxide gas
 - d roots
- 53 The primary source of energy for all living organisms on the Earth is
- a the Sun.
 - b green plants.
 - c glucose sugar.
 - d photosynthesis process
- 54 Many insects are considered as
- a producers.
 - b primary consumers.
 - c decomposers.
 - d secondary consumers
- 55 which of the following food chains shows the correct way of energy flow through consumers?
- a Secondary consumer → primary consumer → tertiary consumer
 - b primary consumer → Secondary consumer → tertiary consumer
 - c tertiary consumer → Secondary consumer → primary consumer
 - d Secondary consumer → tertiary consumer → primary consumer
- 56 Any food chain starts with
- a insects
 - b plants
 - c fungi
 - d bacteria
- 57 Decomposers alwaysthe soil.
- a pollute
 - b damage
 - c benefit
 - d harm
- 58 All types of plants are similar in all the following characters, except.
- a they are eaten by primary consumers
 - b they are able to make photosynthesis process.
 - c they live in different types of ecosystems.
 - d they can feed on predators

59 Plants with sticky seeds need to stick to disperse and grow in a new habitat .

- a light energy from the Sun b air
c body of a living organism d water

60 Look at the following two ecosystems, then choose the correct answer:



Ecosystem (1)



Ecosystem (2)

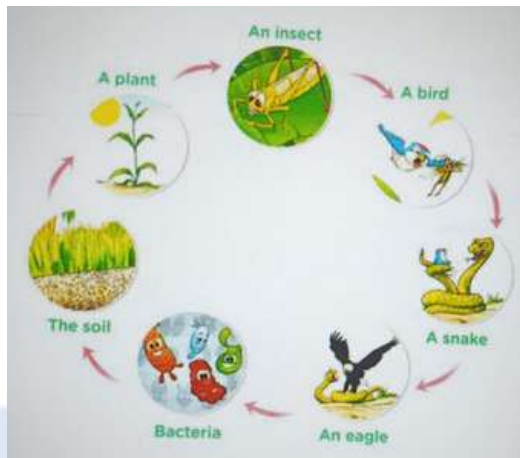
1. The hawk can find food in
 - a. ecosystem (1) only.
 - b. ecosystem (2) only.
 - c. both ecosystems (1) and (2).
 - d. neither ecosystems (1) nor (2).
2. The light energy of the Sun can pass from the plants to the predator in
 - a. ecosystem (2) in the absence of the prey.
 - b. both ecosystems (1) and (2).
 - c. ecosystem (1) only.
 - d. ecosystem (2) only.
3. Photosynthesis process occurs in
 - a. both ecosystems (1) and (2).
 - b. ecosystem (1) only.
 - c. ecosystem (2) only.
 - d. ecosystem (1) in the absence of water.

Question 3: Complete the following sentences:

- 1 Plants consist of stem,and
- 2 Plants absorbandfrom the soil through their
- 3 Plants make their own food through process that takes place in their leaves.
- 4 The stem carries water and nutrients from theto theof the plant.
- 5 The plants use the light ofto make their own food.

- 6 The food of plants is a type of..... which is made in their by photosynthesis process.
- 7 Soil is the source of and nutrients which the plant needs to make its own food.
- 8 Some seeds can be transported from one place to another by floating on water as seeds or traveling by wind asseeds.
- 9 Burdock seeds can stick to animal fur because they have
- 10 Maple seeds and dandelion seeds can travel by wind because they are
- 11 All living organisms needto do their activities and to carry out their life processes.
- 12 Plants produce andduring photosynthesis process.
- 13 In a food chain, the energy flows from a consumer to a secondary consumer
- 14 An area that provides food, water and shelter to all living organisms which live in it, is known as
- 15 The interaction among many food chains is known as
- 16 In any food chain, plants are considered as
- 17 If a frog eats an insect that feeds on plants, this means that the frog is a
- 18 Humans can eat producers and
- 19and water are considered one of the basic needs for the growth and survival of living organisms.
- 20 :help plant to get water from the soil.
- 21 The plant getsandfrom the soil
- 22 A plant needs water and sunlight to make photosynthesis process.
- 23 Light energy in a plant is converted intoenergy in the photosynthesis process.
- 24 The plant's energy source is sugar
- 25 The animal that feeds on another animal is called
- 26 Energy is transferred from to consuming organisms
- 27 Organisms that responsible for returning organic matter to the soil are

- 28 Study the following figure that shows how nutrients are recycled back into the soil, then complete the sentences below:



1. Photosynthesis process is done by, so it is a producer.
2. Decomposition process is done by, so they are decomposers.
3. The insect is a consumer, because it eats the plant.
4. The large meat-eating animal is the
5. When the eagle dies, its nutrients return back to the with the help of bacteria.

Question 4: Put (✓) or (✗):

- 1 Plants need water and air only to grow. ()
- 2 Stem of the plant absorbs water from the soil. ()
- 3 Human, animals and plants need food and water to survive. ()
- 4 Plants use the sunlight to make their own food. ()
- 5 Carbon dioxide gas is one of the plant needs that helps it to grow and survive ()
- 6 Photosynthesis process takes place in the plant roots. ()
- 7 The plant can make its own food in the absence of water. ()
- 8 At the beginning of germinating some bean seeds, they can grow without soil and water. ()
- 9 All seeds need soil in its initial growth. ()
- 10 After many days, the growth of plant's seeds in a pot containing soil is similar to the growth of plant's seeds in a wet paper towel. ()
- 11 A green plant can grow well if it is placed in a dark room for many days. ()

- 12 Leaves of plants collect sunlight and carbon dioxide gas from air. ()
- 13 When the plant makes photosynthesis process, its leaves become weak and yellow ()
- 14 Seeds germination means the transportation of seeds from one place to another. (X) ()
- 15 There are many ways of seeds dispersal in nature. ()
- 16 Coconut seeds can float on water. ()
- 17 Dandelion seeds have spines, so they stick to animal fur. ()
- 18 Tomato seeds are light so they can disperse through air. ()
- 19 Human could be one of the ways of seeds dispersal. ()
- 20 Photosynthesis process takes place in the plant's roots. ()
- 21 The food web describes energy flow and feeding interactions between living organisms in an ecosystem ()
- 22 At the beginning of germinating some bean seeds, they can grow without soil or water ()
- 23 Birds eat insects as preys to get their energy ()
- 24 When living organisms die, all energies that present in their bodies go to the soil. ()
- 25 Hawks do not eat some types of food like plant leaves. ()
- 26 Glucose sugar that is produced by producers has a low amount of energy ()
- 22 Some producers can live in hot sunny weather but they cannot live in a completely dark room ()
- 23 Producers and consumers use carbon dioxide gas for making their food ()
- 24 Hawks, alligators and sharks are predators ()
- 25 Human can eat plants and animals ()
- 26 Food web is the interconnected food chains that shows many different feeding relationships ()

Question 5: Correct the underlined word:

- 1 Coconut seeds are dispersed by wind. ()

- 2 Burdock seeds are light seeds. ()
- 3 Tomato and coconut seeds are eaten by animals and come out with their stool ()

Question 6: Give reasons for:

- 1 Roots have important role in photosynthesis process of plants.
.....
- 2 Photosynthesis process is important for plants to survive.
.....
- 3 The presence of hairlike structures in plant's roots.
.....
- 4 Xylem vessels are important for the plant.
.....
- 5 The presence of stomata on the surface of plant's leaves.
.....
- 6 Chlorophyll has an important role in photosynthesis process.
.....
.....
- 7 There would not be life on Earth in the absence of plants.
.....
.....
- 8 Xylem in plant is a one-way vessel.
.....
- 9 Flowers are important parts for the plant.
.....
- 10 Seeds dispersal may take place by animal in two different ways.
.....
.....
- 11 Seeds of maple or dandelion plants can disperse through wind easily.
.....

- 12 Burdock seeds can stick to animal fur.
.....
- 13 Human needs to eat some animals and plants.
.....
- 14 Soil fertility depends on decomposers
.....
- 15 Sticky seeds of some plants can stick to human clothes or an animal's body.
.....
- 16 Studying restoration ecology is very important
.....
- 17 Animals differ in the type of food they eat.
.....
.....
- 18 Producers depend on light energy of the Sun to grow.
.....
- 19 In a food chain, a bird is not considered as a secondary consumer if it eats plants
.....
- 20 Light seeds are dispersed by wind.
.....
- 21 Sugar is not a basic need for the plant.
.....
- 22 A young squirrel needs food.
.....
- 23 The human body needs water and food on a daily basis.
.....
- 24 The presence of root hairs in the plant root.
.....

- 25 Sunlight is one of the basic needs of the plant.
.....
- 26 The plant does not grow well in a paper towel
.....
- 27 A food web is a system of energy transfer
.....
- 28 The importance of chlorophyll in plant leaves.
.....
- 29 The human body needs water and food on a daily basis.
.....

Question 7: What happens if ...?

- 1 Plants have no stems.
.....
- 2 Plants can't get carbon dioxide gas from air.
.....
- 3 We put a green plant in a dark room for many days.
.....
- 4 We put a seed of bean in wet soil for many days.
.....
- 5 The plant doesn't have roots.
.....
.....
- 6 Stomata of a plant get closed for a long time.
.....
- 7 Plant's leaves don't contain chlorophyll.
.....
.....
- 8 The plant stops making photosynthesis process for several days.
.....

- 9 Plants can't produce glucose sugar during photosynthesis process.
.....
- 10 We remove the flowers of a plant.
.....
- 11 A hawk is placed in an ecosystem that doesn't contain any living organisms except plants
.....
- 12 There is no sunlight reaches the Earth's surface.
.....
- 13 All primary consumers disappear from a certain food chain.
.....
- 14 All types of decomposers are absent from an ecosystem.
.....
- 15 The body of a hawk after its death
.....
- 16 The plant does not have access to natural resources.
.....
- 17 The plant does not receive the necessary care.
.....
- 18 There are no roots for the plant.
.....
- 19 Plants disappear from the surface of the earth?
.....
.....
- 20 A green plant is placed in a dark place for a period of time
.....
- 21 The roots disappear from the plant.
.....
.....

Question 8: Answer the following

- 1- What do plants need to live and grow?
- 2- How do plants get their food?
- 3- What are the different stages that a plant goes through during its growth?
.....
- 4- Mention some of the non-living components necessary for survival in an ecosystem
.....
- 5- What is the role of roots in obtaining food for the plant?
.....
- 6- What are the similarities between the needs of both plants and humans?
.....
- 7- What is the role of stems in the plant to get food?
.....
- 8- What does the plant need to survive?
.....
- 9- What is the role of leaves in the plant to get food?
.....
- 10- What are the differences between the needs of plants and humans?
.....
.....
- 11- Write what the following statement refers to: Small holes in the leaves of a plant through which air passes.
.....
- 12- Mention the function of: Root hairs
.....
- 13- Compare between the function of each of the following in the plant: Wood vessels - xylem vessels
.....
- 14- Write what the following statement refers to: Small holes in the leaves of a plant through which air passes.
.....
- 15- Which is better: A plant that grows in the soil or a plant that grows in the paper towels?
.....

16- Write what the following statement refers to: Tubes in the plant are responsible for transporting nutrients from the leaves to all parts of the plant

.....

17- Explain how the plant makes its own food.

.....

18- How do the parts of plant benefit from water, air, and light to carry out vital processes?

.....

19- Write what the following statement refers to: A substance responsible for the green color of the plant

.....

20- Compare between the types of consumer organisms

.....

.....

.....

21- Arrange the following organisms to show the transfer of energy in the food chain: Mouse - grass - hawk - snake

.....

.....

22- Form a food chain from the following organisms: Rabbit grass - hawk -snake

.....

23- Form a food chain from the following organisms: Insect - snake - grass - frog - hawk

.....

24- Mention: The importance of the earthworm to the soil

.....

Question 9: Choose from column (B) what suits it in column (A)

(A)

(B)

1. Sunlight
2. Carbon dioxide
3. Water
4. Oxygen

- a. is absorbed by the roots of the plant.
- b. is necessary for plant's growth.
- c. is not a basic need for plant growth.
- d. is a gas which is produced during photosynthesis process.
- e. is a gas which is used by the plant during photosynthesis process

1.

2.

3.

4.

(A)

(B)

1. Pine trees
2. Potato plants
3. Vines
4. Tree trunks and shrubs

- a. have climb stems.
- b. have runner stems.
- c. have tuber stems.
- d. have wood stems.
- e. have needles leaves.

1.

2.

3.

4.

(A)

(B)

1. Coconut seeds
2. Maple seeds and dandelion seeds
3. Burdock seeds
4. Tomato seeds and apple seeds

- a. stick to animal fur.
- b. float on water.
- c. are eaten by animals.
- d. travel by wind.
- e. stay inside flowers without movement.

1.

2.

3.

4.

(A)

(B)

1. Roots
2. Stems
3. Leaves
4. Xylem
5. Stomata

- a. allow gases to come in and out of the plant.
- b. collect sunlight and carbon dioxide gas which combines with water to help the plant to make its own food.
- c. tubes or vessels that move water and nutrients up the plant's stem.
- d. absorb water and nutrients from the soil.
- e. transport nutrients and water from the roots to all parts of the plant.
- f. absorb oxygen gas from the soil.

1.

2.

3.

4.

5.

Question 10: What is meant by (Define):

- 1 Photosynthesis process:
.....
- 2 Stomata:
.....
- 3 Flowers:
.....
- 4 Plant reproduction:
.....

Question 11: What is the function of?

- 1 Stomata:
- 2 Phloem:
- 3 Phloem:
- 4 Xylem :
- 5 Chlorophyll:
- 6 Human circulatory system:
- 7 Heart:
- 8 Arteries :
- 9 Veins:
- 10 Plant transport system:
- 11 Flowers:

Question 12: Write one example for each of the following:

- 1 Wood stem:
- 2 Climb stem:
- 3 Tuber stem:
- 4 Upright stem:
- 5 A plant with runners stems :
- 6 decomposers :
- 7 a consuming organism:.....
- 8 a producer organism:

Question 13: various question

- Look at the following pictures and then answer:

Stems have different shapes, including



A wood stem
as



.....
as flowers



..... as
grapes (vines)



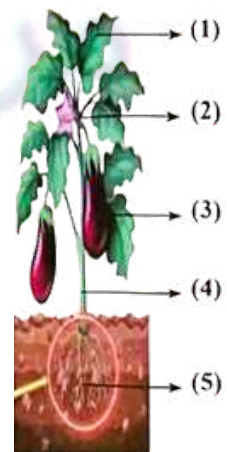
Tuber stem
as



.....
as

The Amazing World of Plants

- Have you seen this plant before? Yes () No()
- What is the name of this plant?
- Write the names of the parts indicated on the plant
- 1- 2-
- 3- 4-
- 5-
- What is the source of energy for this plant?
- What is this energy used for?



Discover the secrets of a happy tree

Tree Needs

Work with your classmates to identify the basic needs of a tree for photosynthesis.

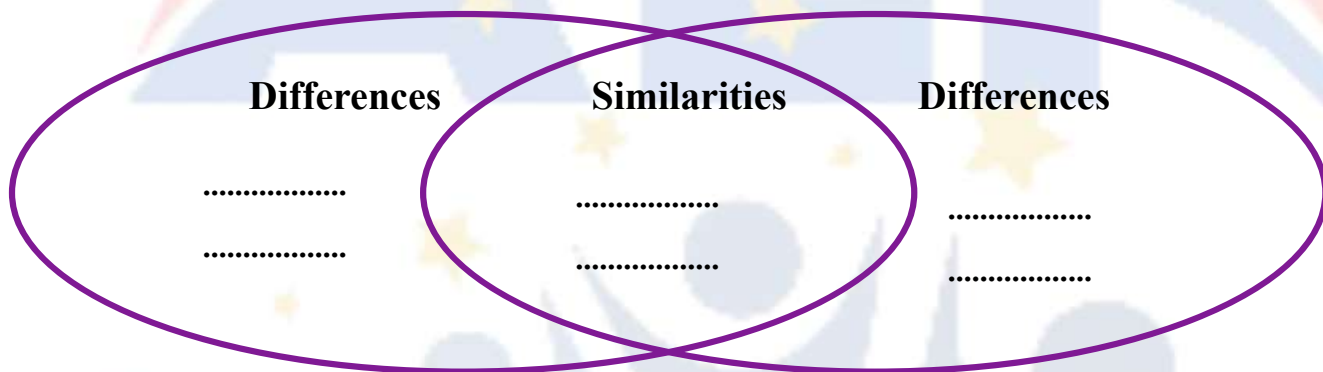
- Sunlight () - Oxygen gas ()
- Water and salts () - Carbon dioxide gas ()
- Nitrogen gas () - Chloroplasts ()
- Glucose sugar () - Starch and sugars ()
- Soil () - Chemical fertilizers ()



Common needs and striking differences

Plants and animals

Research and discuss with your classmate the similarities and differences between the needs of plants and humans (you can use the following chart).



Think and discuss with your classmate what substances your body needs for healthy growth and development? Then record your answers.

.....

.....

.....

Question 1: write the scientific term of each of the following:

- 1 A gas taken from the air by leaves to help the plant to make its own food . (**carbon dioxide gas**)
- 2 A liquid substance that plants, animals and human need to survive. (**water**)
- 3 Transferring of seeds from a place to another (**Seeds dispersal**)
- 4 It is the primary source of energy for all living organisms on the Earth (**sun**)
- 5 A group of living organisms that can produce their own food (**producers**)
- 6 The animal that is eaten by another animal (**prey**)
- 7 It is a model that shows how energy flows from one organism to another in an ecosystem (**food chain**)
- 8 The process that takes place inside plants through which we can get oxygen (**photosynthesis process**)
- 9 A group of living organisms that can live on decaying dead organisms (**decomposers**)
- 10 It is a process through which decomposers can recycle nutrients back into the soil (**decomposition process**)
- 11 A community that contains living organisms and nonliving things (**ecosystem**)
- 12 A substance that is produced from the plant during photosynthesis process and provides it with its needed energy. (**glucose sugar**)
- 13 It is found in the plant's leaves that gives them the green color and absorbs energy from the sunlight (**chlorophyll**)

Question 2: Choose the correct answer:**Concept (1)****Lesson 1**

- 1 The of plant absorb water and nutrients from the soil.

a	roots	b	stems	c	leaves	d	flowers
---	--------------	---	-------	---	--------	---	---------
- 2 Humans and animals need to eat to get

a	oxygen gas.	b	carbon dioxide gas.
c	energy	d	soil

- 3 Plants make their food by a process known as
- a respiration. b **photosynthesis.**
c absorption. d digestion.
- 4 and are from the plant needs that help it make photosynthesis process
- a Oxygen water b Water earthworms
c **Sunlight-carbon dioxide** d Nutrients - oxygen
- 5 Plants and humans are similar in some of their basic needs to survive such as
- a sunlight and rocks. b carbon dioxide and soil.
c **water and air.** d soil and water
- 6 Plants take..... from the air to make its food.
- a water b oxygen gas
c **carbon dioxide gas** d sugar
- 7 All the following are plant basic needs to make its own food, except
- a water. b air. c sunlight. d **rocks**
- 8 Which of the following sentences is wrong?
- a Plants need sunlight to grow.
b Plants roots absorb water from the soil.
c **Plants make their own food by respiration process.**
d Plants make their own food in their leaves.
- 9 Water and nutrients are carried from the roots to the leaves through the
- a **stem.** b soil. c fruits. d flowers.
- 10 In photosynthesis process, plant produces to get energy.
- a oxygen gas b **sugar**
c carbon dioxide d water

Lesson 2

- 11 When the plant seed begins to grow and makes sprouts, this process is called
- a respiration. b **germination.**
c absorption. d reproduction.

- 12 If we put a bean seed in a....., it may germinate.
- a dry paper towel b **wet paper towel**
c plastic plate d dry soil
- 13 In the presence of water, seeds can germinate at the beginning of growth without the need of
- a **soil.** b rocks. c insects. d dry paper towel.
- 14 Sunlight and carbon dioxide gas are collected by plant's to make its own food..
- a roots b stems c **leaves** d flowers
- 15 The plant producesthrough photosynthesis process that gives it the needed energy to grow
- a oxygen gas b water
c carbon dioxide gas d **sugar**
- 16 Without the plants can't grow well.
- a insects b rocks c **sunlight** d moonlight
- 17 The roots of a plant absorb from the soil to help it grow.
- a oxygen gas b carbon dioxide gas
c sugar d **water**

lesson 3

- 18 The plant's anchor it in the soil.
- a leaves b stems c **roots** d flowers
- 19 There are in the plant's roots that help the plant to get more water and nutrients
- a vessels b **root hairs** c stomata d flowers
- 20 The tubes that are responsible for moving water and nutrients up the plant's stem are called
- a roots. b **xylem.** c leaves. d flowers
- 21 plant has climb stem
- a Potato b Tomato c **Vine** d Pine

- 22 The kind of stems that extend underground are called stems
 a climb b **tuber** c runner d wood
- 23 Potato plant has stem
 a upright b climb c **tuber** d runner
- 24 Stomata are present on plant's to allow air to pass through them
 a roots b stems c **leaves** d flowers
- 25 can make their own food.
 a **Plants only** b Animals only
 c Humans only d Plants and some animals
- 26 tree has narrow leaves.
 a Potato b **Pine** c Acacia d Grapes
- 27 The green plants can make their own food through
 a roots. b stems.
 c **leaves.** d flowers.
- 28 help the plant's leaves to get water and nutrients from the soil
 a Roots only b Xylem only
 c **Roots and xylem** d Xylem and stomata
- 29 All the following parts are important for plants to make photosynthesis process, except
 a roots. b stems. c leaves. d **flowers**
- 30 The green color of plant's leaves is due to the presence of.....
 a xylem. b phloem.
 c **chlorophyll.** d stomata
- 31 Food materials are transported from the leaves to other parts of the plant through
 a xylem. b **phloem.**
 c chlorophyll. d stomata

- 32 Animals and humans need to breathe
- a **oxygen gas** b carbon dioxide gas
c water vapor d sugar
- 33 Green plants produce all the following substances during photosynthesis process, except
- a oxygen gas. b starches.
c **carbone dioxide gas.** d fats

lesson 4

- 34 The human system that moves blood through the body is called system
- a digestive b respiratory
c **circulatory** d nervous
- 35 Air enters the human body through the
- a nose only. b mouth only.
c **nose and mouth.** d mouth and stomach.
- 36 The human circulatory system consists of
- a lungs, heart and blood. b **heart, blood vessels and blood.**
c blood vessels and stomach. d heart and pancreas.
- 37 carry blood which is rich in oxygen and glucose from the heart to the body cells.
- a **Arteries** b Lungs and veins
c Veins d Brain and veins
- 38 Blood rich in carbon dioxide gas returns back to the heart through
- a arteries. b **veins.** c lungs. d xylem
- 39system in plants consists of tubes that water and nutrients move through it.
- a Digestive b Respiratory
c **Transport** d Nervous
- 40 The heart in the human circulatory system consists of
- a two arteries and two ventricles. b **two atria and two ventricles.**
c two veins and two atria. d two ventricles and two veins.

- 41 Glucose sugar is transported from the leaves to other parts of the plant through.....
- a xylem. b **phloem.** c roots. d stems.
- 42 in the leaves allow air to enter the plant.
- a Xylem b Phloem c **Stomata** d Chlorophyll
- 43 In plant's leaves, light energy is converted into..... energy during photosynthesis process
- a sound b electric c **chemical** d kinetic
- 44 Plants can produce new seeds by.....
- a roots. b leaves. c stems. d **flowers**
- 40 The movement of seeds from a place to another is called.....
- a seeds germination. b **seeds dispersal.**
c seeds reproduction. d seeds growth
- 41 All the following can help in seed dispersal, except.....
- a wind. b human and animals.
c water. d **soil and sunlight**
- 42 Maple seeds travel by wind because they are.....
- a **light seeds.** b spiny seeds.
c heavy seeds. d smooth seeds
- 43 Burdock seeds have spines, so they can.....
- a float on water. b **stick to animal fur.**
c travel by wind. d be eaten by animals
- 44 From the ways of seeds dispersal is floating on water as in
- a burdock seeds. b tomato seeds.
c dandelion seeds. d **coconut seeds.**

Concept (2)

- 45 Photosynthesis process, means
- a making glucose in the absence of light energy.
 - b **making glucose in the presence of light energy.**
 - c using glucose to produce energy.
 - d using salts to produce energy
- 46 If a spider eats a bee that feeds on a plant
- a both spider and bee are primary consumers.
 - b both spider and bee are secondary consumers.
 - c the bee is a secondary consumer.
 - d **the spider is a secondary consumer**
- 47 The predator that feeds on a living organism, may be to organism.
- a a decomposer
 - b **a prey**
 - c a producer
 - d a primary consumer
- 48 The model that shows many interactions between different types of living organisms is known as
- a food chain.
 - b **food web.**
 - c ecosystem.
 - d habitat
- 49 Plant-community ecologists do their studies and researches on
- a **plants only.**
 - b animals only.
 - c plants and animals.
 - d producers and consumers
- 50 If a plant doesn't disperse its seeds, so the number of this plant will
- a increase.
 - b **decrease.**
 - c not be affected
 - d be positively affected.
- 51 Rabbit can be eaten by all the following living organisms, except
- a hawk
 - b caracal
 - c **grass**
 - d deagle.

- 51 There is an energy flow between all the following two living organisms, except
- a a lion and a deer.
 - b a human and a fish.
 - c **a tomato plant and a potato plant**
 - d a hawk and a mouse
- 52 Leaves of green plants absorb the sunlight to combine water with to produce their own food
- a oxygen gas
 - b soil
 - c **carbon dioxide gas**
 - d roots
- 53 The primary source of energy for all living organisms on the Earth is
- a **the Sun.**
 - b green plants.
 - c glucose sugar.
 - d photosynthesis process
- 54 Many insects are considered as
- a producers.
 - b **primary consumers.**
 - c decomposers.
 - d secondary consumers
- 55 which of the following food chains shows the correct way of energy flow through consumers?
- a Secondary consumer → primary consumer → tertiary consumer
 - b **primary consumer → Secondary consumer → tertiary consumer**
 - c tertiary consumer → Secondary consumer → primary consumer
 - d Secondary consumer → tertiary consumer → primary consumer
- 56 Any food chain starts with
- a insects
 - b **plants**
 - c fungi
 - d bacteria
- 57 Decomposers alwaysthe soil.
- a pollute
 - b damage
 - c **benefit**
 - d harm
- 58 All types of plants are similar in all the following characters, except.
- a they are eaten by primary consumers
 - b they are able to make photosynthesis process.
 - c they live in different types of ecosystems.
 - d **they can feed on predators**

59 Plants with sticky seeds need to stick to disperse and grow in a new habitat .

- a light energy from the Sun b air
c **body of a living organism** d water

60 Look at the following two ecosystems, then choose the correct answer:



Ecosystem (1)



Ecosystem (2)

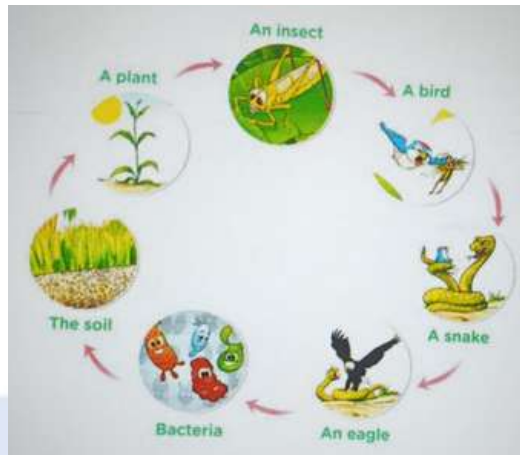
- The hawk can find food in
 - ecosystem (1) only.
 - ecosystem (2) only.**
 - both ecosystems (1) and (2).
 - neither ecosystems (1) nor (2).
- The light energy of the Sun can pass from the plants to the predator in
 - ecosystem (2) in the absence of the prey.
 - both ecosystems (1) and (2).
 - ecosystem (1) only.
 - ecosystem (2) only.**
- Photosynthesis process occurs in
 - both ecosystems (1) and (2).**
 - ecosystem (1) only.
 - ecosystem (2) only.
 - ecosystem (1) in the absence of water.

Question 3: Complete the following sentences:

- Plants consist of stem, **leaves** and **roots**.
- Plants absorb **water** and **nutrients** from the soil through their **roots**.
- Plants make their own food through **photosynthesis** process that takes place in their leaves.
- The stem carries water and nutrients from the **roots** to the **leaves** of the plant.
- The plants use the light of **the sun** to make their own food.

- 6 The food of plants is a type of **sugar** which is made in their **leaves** by photosynthesis process.
- 7 Soil is the source of **water** and nutrients which the plant needs to make its own food.
- 8 Some seeds can be transported from one place to another by floating on water as **coconut** seeds or traveling by wind as **maple, dandelion** seeds.
- 9 Burdock seeds can stick to animal fur because they have **spines**.
- 10 Maple seeds and dandelion seeds can travel by wind because they are **light seeds**.
- 11 All living organisms need **energy** to do their activities and to carry out their life processes.
- 12 Plants produce **glucose sugar** and **oxygen** during photosynthesis process.
- 13 In a food chain, the energy flows from a **primary** consumer to a secondary consumer
- 14 An area that provides food, water and shelter to all living organisms which live in it, is known as **ecosystem**
- 15 The interaction among many food chains is known as **food web**
- 16 In any food chain, plants are considered as **producers**
- 17 If a frog eats an insect that feeds on plants, this means that the frog is a **secondary consumer**
- 18 Humans can eat producers and **consumers**
- 19 **Air** and water are considered one of the basic needs for the growth and survival of living organisms.
- 20 **Roots** help plant to get water from the soil.
- 21 The plant gets **water** and **nutrients** from the soil
- 22 A plant needs **Carbon dioxide gas** water and sunlight to make photosynthesis process.
- 23 Light energy in a plant is converted into **Chemical** energy in the photosynthesis process.
- 24 The plant's energy source is **Glucose** sugar
- 25 The animal that feeds on another animal is called **Predator**
- 26 Energy is transferred from **Primary consumer** to consuming organisms
- 27 Organisms that responsible for returning organic matter to the soil are **Decomposers**

- 28 Study the following figure that shows how nutrients are recycled back into the soil, then complete the sentences below:



1. Photosynthesis process is done by **plant**, so it is a producer.
2. Decomposition process is done by **bacteria**, so they are decomposers.
3. The insect is a **primary consumer** consumer, because it eats the plant.
4. The large meat-eating animal is the **eagle**.
5. When the eagle dies, its nutrients return back to the **soil** with the help of bacteria.

Question 4: Put (✓) or (✗):

- 1 Plants need water and air only to grow. (✗)
- 2 Stem of the plant absorbs water from the soil. (✗)
- 3 Human, animals and plants need food and water to survive. (✓)
- 4 Plants use the sunlight to make their own food. (✓)
- 5 Carbon dioxide gas is one of the plant needs that helps it to grow and survive (✓)
- 6 Photosynthesis process takes place in the plant roots. (✗)
- 7 The plant can make its own food in the absence of water. (✗)
- 8 At the beginning of germinating some bean seeds, they can grow without soil and water. (✗)
- 9 All seeds need soil in its initial growth. (✗)
- 10 After many days, the growth of plant's seeds in a pot containing soil is similar to the growth of plant's seeds in a wet paper towel. (✗)
- 11 A green plant can grow well if it is placed in a dark room for many days. (✗)

- 12 Leaves of plants collect sunlight and carbon dioxide gas from air. (✓)
- 13 When the plant makes photosynthesis process, its leaves become weak and yellow (✗)
- 14 Seeds germination means the transportation of seeds from one place to another. (X) (✗)
- 15 There are many ways of seeds dispersal in nature. (✓)
- 16 Coconut seeds can float on water. (✓)
- 17 Dandelion seeds have spines, so they stick to animal fur. (✗)
- 18 Tomato seeds are light so they can disperse through air. (✗)
- 19 Human could be one of the ways of seeds dispersal. (✓)
- 20 Photosynthesis process takes place in the plant's roots. (✗)
- 21 The food web describes energy flow and feeding interactions between living organisms in an ecosystem (✓)
- 22 At the beginning of germinating some bean seeds, they can grow without soil or water (✗)
- 23 Birds eat insects as preys to get their energy (✓)
- 24 When living organisms die, all energies that present in their bodies go to the soil. (✓)
- 25 Hawks do not eat some types of food like plant leaves. (✓)
- 26 Glucose sugar that is produced by producers has a low amount of energy (✗)
- 22 Some producers can live in hot sunny weather but they cannot live in a completely dark room (✓)
- 23 Producers and consumers use carbon dioxide gas for making their food (✗)
- 24 Hawks, alligators and sharks are predators (✓)
- 25 Human can eat plants and animals (✓)
- 26 Food web is the interconnected food chains that shows many different feeding relationships (✓)

Question 5: Correct the underlined word:

- 1 Coconut seeds are dispersed by wind. (**water**)

- 2 Burdock seeds are light seeds. (**spiny**)
- 3 Tomato and coconut seeds are eaten by animals and come out with their stool (**apple**)

Question 6: Give reasons for:

- 1 Roots have important role in photosynthesis process of plants.
Because the roots help the plant absorb water and nutrients from the soil.
- 2 Photosynthesis process is important for plants to survive.
Because it helps the plant make its own food
- 3 The presence of hairlike structures in plant's roots.
To increase the amount of absorbed water and nutrients that the plant needs from the soil
- 4 Xylem vessels are important for the plant.
Because they transport water and nutrients from the roots to the plant's leaves
- 5 The presence of stomata on the surface of plant's leaves.
To allow gases to move in and out of the plant.
- 6 Chlorophyll has an important role in photosynthesis process.
Because chlorophyll absorbs the energy from sunlight, which helps the plant make the photosynthesis process.
- 7 There would not be life on Earth in the absence of plants.
Because plants produce oxygen gas during the photosynthesis process, which is important for all living organisms to breathe
- 8 Xylem in plant is a one-way vessel.
Because xylem carries up water and nutrients from the roots to the leaves
- 9 Flowers are important parts for the plant.
Because flowers produce seeds for the plant that help it reproduce.
- 10 Seeds dispersal may take place by animal in two different ways.
Because seeds can stick to animals' fur or can be eaten by animals and come out with "their stool.
- 11 Seeds of maple or dandelion plants can disperse through wind easily.
Because they are light seeds

- 12 Burdock seeds can stick to animal fur.
Because they are spiny seeds
- 13 Human needs to eat some animals and plants.
To get energy because they can't produce their own food
- 14 Soil fertility depends on decomposers
Because decomposers return nutrients of the dead organisms back to the soil
- 15 Sticky seeds of some plants can stick to human clothes or an animal's body.
to disperse their seeds to other places
- 16 Studying restoration ecology is very important
because it is important to rebuild habitats which were damaged
- 17 Animals differ in the type of food they eat.
Because different animals eat plants or other animals or both of them to obtain energy
- 18 Producers depend on light energy of the Sun to grow.
To make their own food during photosynthesis process
- 19 In a food chain, a bird is not considered as a secondary consumer if it eats plants
Because the living organisms that eats plants is considered as a primary consumer
- 20 Light seeds are dispersed by wind.
Because they can be carried away by air
- 21 Sugar is not a basic need for the plant.
Because plants make it through photosynthesis process
- 22 A young squirrel needs food.
To grow and survive
- 23 The human body needs water and food on a daily basis.
To grow and survive
- 24 The presence of root hairs in the plant root.
To increase absorption of water and nutrient
- 25 Sunlight is one of the basic needs of the plant.
to make its own food by photosynthesis process

- 26 The plant does not grow well in a paper towel
because Soil provide plant with nutrients, that allows plant to grow well
- 27 A food web is a system of energy transfer
because it shows the following of energy among many living organisms
- 28 The importance of chlorophyll in plant leaves.
Capture(absorb) sunlight imp. for photosynthesis
- 29 The human body needs water and food on a daily basis.
To grow and survive

Question 7: What happens if ...?

- 1 Plants have no stems.
Water and nutrients will not be carried from the roots to the leaves.
- 2 Plants can't get carbon dioxide gas from air.
Plants can't make their own food during the photosynthesis process.
- 3 We put a green plant in a dark room for many days.
The plant can't make its own food during the photosynthesis process
- 4 We put a seed of bean in wet soil for many days.
It will germinate and grow well.
- 5 The plant doesn't have roots.
The plant cannot absorb water and nutrients from the soil and also cannot be fixed in the soil.
- 6 Stomata of a plant get closed for a long time.
Gases cannot move into or out of the plant's leaves, and the plant will die
- 7 Plant's leaves don't contain chlorophyll.
The plant cannot absorb the energy from sunlight and cannot make photosynthesis process
- 8 The plant stops making photosynthesis process for several days.
It cannot make its own food, and it will die.
- 9 Plants can't produce glucose sugar during photosynthesis process.
Plants can't get their needed energy to survive and grow.

- 10 We remove the flowers of a plant.
The plant can't produce seeds that help it reproduce
- 11 A hawk is placed in an ecosystem that doesn't contain any living organisms except plants
The hawk moves to search for food in another place
- 12 There is no sunlight reaches the Earth's surface.
plants can't make their own food and they will die and there is no life on the earth
- 13 All primary consumers disappear from a certain food chain.
the secondary consumer will move to another place to search for food or they will die
- 14 All types of decomposers are absent from an ecosystem.
died organisms won't be decomposed and their nutrients won't return back to the soil
- 15 The body of a hawk after its death
It will be decomposed and the nutrients in it's body return back to the soil
- 16 The plant does not have access to natural resources.
It cant make its own food and it will die
- 17 The plant does not receive the necessary care.
It can't make its own food and it will die
- 18 There are no roots for the plant.
It can't absorb water and, nutrients form the soil
- 19 Plants disappear from the surface of the earth?
No Oxygen gas
No food of Humala amine
- 20 A green plant is placed in a dark place for a period of time
plant will will not grow well and has less food
- 21 The roots disappear from the plant.
No fixing plant in soil
No absorption of water and nutrient from soil.

Question 8: Answer the following

1- What do plants need to live and grow? **Sunlight - Air - Water**

2- How do plants get their food? **by photosynthesis process**

3- What are the different stages that a plant goes through during its growth?

Seed - Seedling - Large plant

4- Mention some of the non-living components necessary for survival in an ecosystem

Sunlight - water - Air.

5- What is the role of roots in obtaining food for the plant?

Absorb water and nutrients from the soil

6- What are the similarities between the needs of both plants and humans?

Air - water - Food

7- What is the role of stems in the plant to get food?

Transport water and nutrients from roots to leaves

8- What does the plant need to survive?

Carbon dioxide - sunlight - water

9- What is the role of leaves in the plant to get food?

to make the food during the photosynthesis process

10- What are the differences between the needs of plants and humans?

Plants need: Water carbon dioxide sunlight

Humans: Water food Oxygen

11- Write what the following statement refers to: Small holes in the leaves of a plant through which air passes.

Stomata , give plant green color

12- Mention the function of: Root hairs

to increase the amount of water absorbed

13- Compare between the function of each of the following in the plant: Wood vessels - xylem vessels

Xylem vessels: it transport water and nutrients from roots to leaves

Wood vessels (phloem) : it transport glucose from leaves to all parts of the plants

14- Write what the following statement refers to: Small holes in the leaves of a plant through which air passes.

Stomate

15- Which is better: A plant that grows in the soil or a plant that grows in the paper towels?

A plant that growth in the soil

16- Write what the following statement refers to: Tubes in the plant are responsible for transporting nutrients from the leaves to all parts of the plant

Phloem vessel

17- Explain how the plant makes its own food.

By photosynthesis process

18- How do the parts of plant benefit from water, air, and light to carry out vital processes?

Plant can perform photosynthesis process, to make its food

19- Write what the following statement refers to: A substance responsible for the green color of the plant

chlorophyll

20- Compare between the types of consumer organisms

Primary consumers : They are animals that eat plants and they know as Herbivores

Example: rabbits

Secondary consumers: They are animals that eat primary consumers .

Example birds and frogs

**Tertiary consumers: they are animals that eat the secondary consumers .
example lions**

21- Arrange the following organisms to show the transfer of energy in the food chain: Mouse - grass - hawk - snake

Grass - mouse - snake - hawk

22- Form a food chain from the following organisms: Rabbit grass - hawk -snake

Grass - rabbit - snake - hawk

23- Form a food chain from the following organisms: Insect - snake - grass - frog - hawk

Grass - insect - frog - snake - hawk

24- Mention: The importance of the earthworm to the soil

**It returns the nutrients back to the soil by decomposition of body of
Dead organisms**

Question 9: Choose from column (B) what suits it in column (A)

(A)

(B)

1. Sunlight
2. Carbon dioxide
3. Water
4. Oxygen

- a. is absorbed by the roots of the plant.
- b. is necessary for plant's growth.
- c. is not a basic need for plant growth.
- d. is a gas which is produced during photosynthesis process.
- e. is a gas which is used by the plant during photosynthesis process

1.**b**.....

2.**e**.....

3.**a**.....

4.**d**.....

(A)

(B)

1. Pine trees
2. Potato plants
3. Vines
4. Tree trunks and shrubs

- a. have climb stems.
- b. have runner stems.
- c. have tuber stems.
- d. have wood stems.
- e. have needles leaves.

1.**e**.....

2.**c**.....

3.**a**.....

4.**d**.....

(A)

(B)

1. Coconut seeds
2. Maple seeds and dandelion seeds
3. Burdock seeds
4. Tomato seeds and apple seeds

- a. stick to animal fur.
- b. float on water.
- c. are eaten by animals.
- d. travel by wind.
- e. stay inside flowers without movement.

1.**b**.....

2.**d**.....

3.**a**.....

4.**c**.....

(A)

(B)

1. Roots
2. Stems
3. Leaves
4. Xylem
5. Stomata

- a. allow gases to come in and out of the plant.
- b. collect sunlight and carbon dioxide gas which combines with water to help the plant to make its own food.
- c. tubes or vessels that move water and nutrients up the plant's stem.
- d. absorb water and nutrients from the soil.
- e. transport nutrients and water from the roots to all parts of the plant.
- f. absorb oxygen gas from the soil.

1.**d**.....

2.**e**.....

3.**b**.....

4.**c**.....

5.**a**.....

Question 10: What is meant by (Define):

- 1 Photosynthesis process:
It is the process through which the green parts of plants (leaves) : absorb sunlight to make their
- 2 Stomata:
They are pores on the surface of the plant's leaves that allow gases to move into and out of the plant
- 3 Flowers:
They are the reproductive parts of many plants.
- 4 Plant reproduction:
It is the process of making new plants

Question 11: What is the function of?

- 1 Stomata: **They allow gases to move into and out of the plant..**
- 2 Phloem: **They transport glucose (sugar) from the leaves to all other**
- 3 Phloem: **They transport glucose (sugar) from the leaves to all other**
- 4 Xylem : **They transport water and nutrients from the plant's roots up to its leaves through the the stem**
- 5 Chlorophyll: **It gives the leaves their green color, and it absorbs energy from the sunlight**
- 6 Human circulatory system: **It transports oxygen and nutrients through the blood to all body**
- 7 Heart: **It pumps the blood to all body parts and receives it back**
- 8 Arteries : **They carry blood rich in oxygen and nutrients (glucose) from the heart to all body cells**
- 9 Veins: **They carry blood rich in carbon dioxide from all body parts to the heart**
- 10 Plant transport system: **It transports water, nutrients, and plant food between the plant parts**
- 11 Flowers: **They produce seeds that help the plant reproduce.**

Question 12: Write one example for each of the following:

- 1 Wood stem: **Shrubs (or tree trunks).**
- 2 Climb stem: **Vines**
- 3 Tuber stem: **Potatoes**
- 4 Upright stem: **Flowers**
- 5 A plant with runners stems : **Strawberry**
- 6 decomposers :. **Millipedes**
- 7 a consuming organism: **lion - eagle - snake**
- 8 a producer organism: **Plants**

Question 13: various question

- Look at the following pictures and then answer:

Stems have different shapes, including



A wood stem
as **Tree trunk**



Upright
as flowers



Climb stem
as grapes (vines)



Tuber stem
as **Potato**



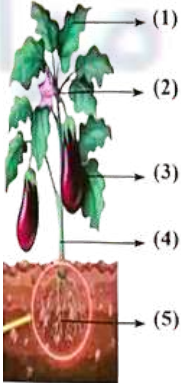
Runner stem
as **Strawberry**

The Amazing World of Plants

- Have you seen this plant before? Yes (☒) No (☐)
 - What is the name of this plant? **Egg plant**
 - Write the names of the parts indicated on the plant
- 1- Leaves 2- Flower

3- Fruit 4- Stem

5- Roots


- What is the source of energy for this plant? **The sun**
 - What is this energy used for? **For making food**

Discover the secrets of a happy tree

Tree Needs

Work with your classmates to identify the basic needs of a tree for photosynthesis.

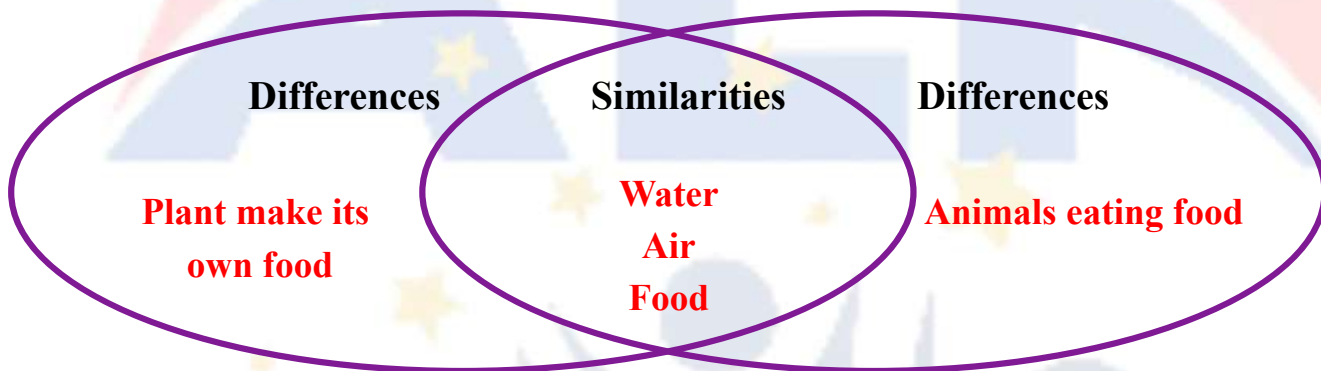
- Sunlight (✓) - Oxygen gas ()
- Water and salts (✓) - Carbon dioxide gas (✓)
- Nitrogen gas () - Chloroplasts (✓)
- Glucose sugar () - Starch and sugars ()
- Soil () - Chemical fertilizers ()



Common needs and striking differences

Plants and animals

Research and discuss with your classmate the similarities and differences between the needs of plants and humans (you can use the following chart).



Think and discuss with your classmate what substances your body needs for healthy growth and development? Then record your answers.

Food
Water
Oxygen

حمل الآن

مجاناً وحصرياً

المراجعة رقم (5)

اختبار شهر اكتوبر



Give Reason

1- Roots have an important role in the photosynthesis process

Because roots absorb water and nutrients from the soil

2- Photosynthesis process is important for plants to survive

Because it helps the plant to make its own food

3- Green plants can make their own food

Because they can make photosynthesis process

4- The presence of stomata on the surface of plant's leaves

To allow gases to move into and out of the plant

5- Xylem vessels are important for the plant

Because they transport water and nutrients from roots to leaves

6- There is no life on Earth in the absence of plants

Because plants produce oxygen gas during photosynthesis process which is important for all living organisms to survive

7- Chlorophyll in plant leaves has an important role in the photosynthesis process

Because it absorbs the sunlight to make photosynthesis process and gives the leaf its green color



- 8- The presence of hairlike structure in plant's roots
To increase the amount of absorbed water
- 9- Flowers are important parts for the plant
Because they produce seeds for the plant reproduction
- 10- The circulatory system has an important role for humans to survive
Because it transports blood through the body
- 11- Xylem in plant is a one-way vessel
Because it carries water and nutrients from roots to leaves in one direction
- 12- Seeds dispersal may take place by animals in two different ways
Because seeds can stick to animal fur or being eaten by animals and come out with their stool
- 13- Seeds of maple or dandelion plants can disperse through wind easily
Because they are light seeds
- 14- Burdock seed can stick to animal fur
Because they have spines
- 15- Human or animals needs to eat some animal and plants
To get energy from food to do different activities because they cannot make their own food



- 16- Sunlight is important for all living organisms
Because it is absorbed by plants to make their own food
then animals and humans eat these plants
- 17- Consumers depend on producers to get their energy
Because they cannot make their own food
- 18- Soil fertility depends on decomposers
Because they return the nutrients of dead organisms
back to the soil
- 19- Sticky seeds of some plants can stick to human clothes or
an animal's body
To disperse their seeds to other places

What happens if

- 1- Plants have no stem
Water and nutrients will not be carried from roots to
leaves
- 2- Plants can't get carbon dioxide gas from air
Plants cannot make photosynthesis process so cannot
make their own food
- 3- We put a green plant in a dark room for many days
plants cannot absorb sunlight to make photosynthesis
process, and the leaves will be yellow/pale green
- 4- We put a seed of bean in a wet soil
It will germinate and grow well



- 5- We put a bean seed in a wet paper towel for more than two months
At the beginning it will germinate and grow but later it will die
- 6- stomata of a plant get closed for a long time
Gases cannot move into or out the plant leaves so plants will die
- 7- Plants' leaves don't contain chlorophyll
Plants cannot absorb the sunlight and cannot make photosynthesis process so the leaves will not be green
- 8- The plant doesn't have roots
The plant cannot absorb water and nutrients from the soil
- 9- The plant stops making photosynthesis process for several days
It cannot make its own food, and it will die
- 10- Plants can't produce glucose sugar during the photosynthesis process
Plants cannot get energy to grow and survive
- 11- Humans don't have a circulatory system
Humans cannot transport blood through the body
- 12- We remove the flowers of a plant
Plants cannot produce seeds for reproduction / Plants cannot reproduce



- 13- There is no sunlight that reaches the Earth's surface
The plants cannot make their own food through the photosynthesis process
- 14- A hawk is placed in an ecosystem that doesn't contain any living organisms except plants
It will move to another ecosystem, or it will die
- 15- All primary consumers disappear from a certain food chain
The secondary consumers will move to another ecosystem, or they will die
- 16- All types of decomposers are absent from an ecosystem
Dead animals will not be decomposed, and their nutrients will not return to the soil



كيفية طباعة صفحات معينة من ملف معين مثلا ازاي نطبع الصفحات من صفحة 4 الى صفحة 9

